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### A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE.

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#### ERRATUM.

No. 48, page 92, line 15, for Covoley read Convay. Mr. Cowley's name has been inadvertently substituted for that of Mr. Conway (in discussing Eteocretan inscriptions).

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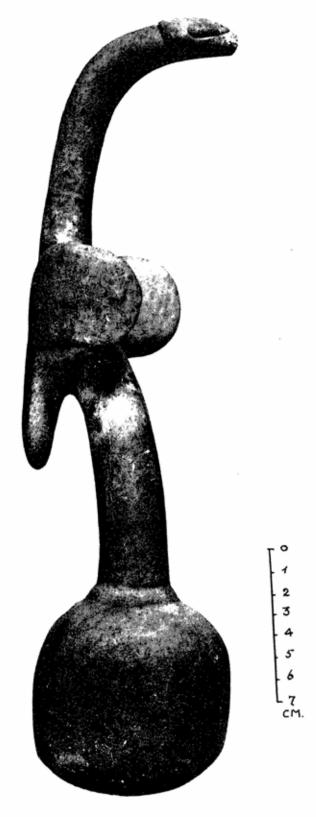
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STONE PESTLE FROM BRITISH NEW GUINEA.

## M A N

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### ORIGINAL ARTICLES.

New Guinea: Stone Pestles. With Plate A. Barton. Note on Stone Pestles from British New Guinea. F. R. Barton, C.M.G.

In a paper on "Prehistoric Objects in British New Guinea," by Seligmann and Joyce, which appeared in the volume of Anthropological Essays dedicated to Professor Tylor, is a description of a pestle and mortar found in the Yodda valley, and, on p. 329, the following sentence occurs :- "Several similar pes-" tles, one of them a quite remarkable " piece of carving in stone, have been " found in this neighbourhood." On Plate A., figured herewith, is shown the "remarkable piece of carving in stone" to which reference is made in the passage just quoted. It is cut from solid greyishbuff stone which is close grained but not very hard; from the "business end" of the pestle, which resembles a compressed sphere, oval in vertical and horizontal section, with diameters of 95, 86, and 65 mm., rises a column, circular in section and inclined slightly to one side, forming the handle, length 104 mm. and diameter 31 mm.; at the top of this is carved the body of a bird, with tail depending and wings stretched outwards and forwards; the neck of the bird is long (135 mm.)

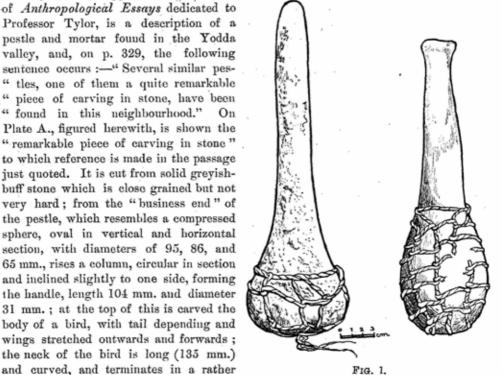


Fig. 1.

snake-like head, with eyes in relief; the bill has been broken off immediately below the nostrils, which are represented by two small circular pits. The total length of the implement is 360 mm.

Unfortunately I can give no details concerning it, save that it was found by a gold-miner, about 40 feet above the present bed of the Aikora (the northern branch of the Gira River) and under 10 feet of alluvial sand and clay. The grinding surface of the pestle is somewhat worn and polished, but, having regard to the peculiar elaboration of its shape and the softness of the stone from which it was cut, I am inclined to think that it was probably for ceremonial use.

Two other pestles, both of dark volcanic rock, are shown in Fig. 1. These were found at Cape Nelson in the possession of present-day natives, who, however, regarded them as charms, and had covered them with the customary network. I need hardly remark that pestles and mortars have not been found in use among any tribe in New Guinea. Both these pestles are circular in horizontal section; one decreases rapidly to a long tapering handle, total length 316 mm., the other lessens in diameter more gradually towards the handle, which is furnished at the end with a "stop-ridge," total length 255 mm. The three pestles are now in the British Museum.

F. R. BARTON.

### Africa, West: Benin. Joyce. Note on the Relation of the Bronze Heads to the Carved Tusks, Benin City. By T. A. Joyce, M.A.

The carved ivory tasks and the human heads in cast bronze, which form some of the chefs d'œuvre of Bini artisans, are too well known to ethnographers to need any introduction; but the question of the inter-relation of the two has from the first proved a stumbling block to students on the Continent, and it is in the hope of settling the matter definitely once and for all that I venture to publish certain information which has recently come into my possession through the kindness of my friend Mr. R. E. Dennett, well known as an authority on West African ethnology and folklore.

I understand that the position is as follows: The authorities in Germany do not deny that the carved tusks were occasionally supported on bronze heads of some description; but they refuse to accept the conclusion formed by Messrs. Read and Dalton that these heads are to be identified with the pattern having a circular aperture in the centre of the crown, figured by them in Antiquities from Benin in the British Museum, Pl. ix, Figs. 5 and 6.

Professor von Luschan writes (Verhl. der Berl. Anthr. Gesellsch., 1898, 161): "Dass sie als Sockel für die geschnitzten Zähne gedient haben . . . ist aber "doch technisch höchst unwahrscheinlich," and gives as his reason that the aperture in the crown is not sufficiently large to admit the end of a tusk. This objection, however, is not very serious; the aperture is structural, and has no necessary connection with the tusk, and the latter stood on the head, and not in the hole. This, I believe, is the only argument which has been brought against the theory that this particular type of head formed a pedestal for a tusk, and it is not very formidable.

As to the arguments in favour of the theory, Nyendael, in 1702, states clearly (Pinkerton's Voyages, xvi, 535) that bronze heads of some kind or other were used in this way. In the King's court "behind a white carpet we were also shown "eleven men's heads cast in copper, by much as good an artist as the former

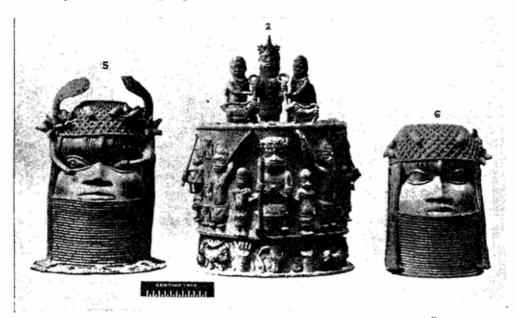
" carver, and upon each of these is an elephant's tooth, these being some of the "King's gods."

As regards the identification of Nyendael's "eleven men's heads" with the type here figured, there is first and foremost Punch's photo published by Ling Roth in Great Benin, p. 79.

This has been refused as evidence on the score that the tusks—so say the objectors—only appear to stand on the heads, and in reality pass behind them.

Secondly, there is a sketch by Captain Egerton, of which there is a copy in the British Museum, similar in its details to Punch's photo.

Thirdly, there are the general statements of the officers accompanying the punitive expedition, and in this connection I quote from a letter to me from my friend, Mr. Ling Roth, "I have it on the authority of Mr. Cecil Punch, who visited Benin several "times before the advent of the punitive expedition, that the tusks were placed on the bronze heads. My brother Felix, who was one of the first Europeans to enter "the city as it was being captured, also tells me the tusks were on the bronze heads.



LOWER HALF OF PL. IX, "ANTIQUITIES FROM THE CITY OF BENIN," BY C. H. READ AND O. M. DALTON.

"The photograph reproduced (Fig. 84) in my book has not been touched up." (The last sentence refers to a charge of retouching brought by our German contemporaries against this illustration.) These statements confirm the evidence ostensibly furnished by Punch's photograph and Egerton's sketch, and prove that the objections brought against them have no foundation. That the tusks were not always so supported is not denied, but has nothing to do with the present question.

A suggestion has been made to me by Dr. Foy, of Cologne, with whom I have corresponded at some length on this subject. There is, he informs me, in the Museum at Hamburg, a bronze head which is furnished with a conical projection at the top of the head instead of the usual circular aperture; there is a cast of this head in Berlin. He suggests that all the bronze heads which supported tusks were of this type, the projection being inserted as a core in the hollow at the base of the tusk. The sketch

he sends me is quite unlike any bronze head known to me, and if his theory were correct it would seem very strange that only one example of this type has come to Europe, while the other type has been imported in considerable numbers. A far more likely suggestion emanating from this side of the North Sea is that the circular aperture at the top of the head was intended for the insertion of a wooden upright which should serve as a core for the tusk. These hypothetical cores, being, it was supposed, rough wooden cones, would naturally be left behind by the collectors of the bronze heads, none of whom were professed ethnographers. This theory appeared reasonable, and at one time I supported it, but my last and most conclusive piece of information proves that it is untenable.

In the hope of obtaining evidence which would satisfy critics on the Continent I wrote to Mr. R. E. Dennett, who had been stationed for some time at Benin, asking him if he could shed any light upon the following questions:—

- (1) Were bronze heads ever used as pedestals for tusks?
- (2) If so, what was the type of head; had it a conical projection on the top which served as a core for the tusk; or was it the type with the circular aperture?
- (3) If the latter, was a wooden core for the tusk ever inserted in the aperture?

Mr. Dennett replied as follows: "The only heads used to bear ivory are the " Humwela . . ." [the name for the type of head shown in the illustration]. "The Humwela were used as pedestals for ivory tusks in the king's palace, where the "ivory took the place of the Ekhure, or the sticks generally found resting on altars. "The king alone had the right to use ivory mounted on Humwela in this way. " Nothing was used with the head to support the ivory [i.e., no wooden core]. The " neck of the head was buried in the clay of which the altar was made, and the " curved side of the ivory rested against the wall at the back of the altar. I have " the evidence of my own eyes, the chief Aro (Ero) having shown me how it was " done. I have never seen any head used in this way by any of the chiefs as yet, " although they have both kinds in their houses. It is possible, however, that when " the king dies the king's son may attempt the use." A subsequent letter written from Lagos affords interesting corroborative evidence. Mr. Dennett writes: "I have " been fortunate enough to meet one Igodaro, a very intelligent Bini, and I allowed " him to look through Antiquities from Benin. I told him to let me know when " he came across the Humwela, which he pronounced Uhumwelau. He pointed out " Figs. 5 and 6 on Pl. ix, and said they were Uhumwelau."

It appears to me that the cumulative evidence is absolutely conclusive, and I hope that foreign workers may be inclined to join their British colleagues in regarding the question as definitely settled.

I wish to express my thanks to Messrs. Dennett and Ling Roth for their assistance in supplying me with additional evidence, and also to Mr. C. H. Read, Keeper of the Department of Ethnography at the British Museum, for permission to reproduce the accompanying illustration.

T. A. JOYCE.

Craniology.

Report on a Human Cranium from a Stone Cist in the Isle of Man. By W. L. H. Duckworth, M.D., Sc.D.

Through the interest of H. A. Auden, Esq., D.Sc., the University Museum has



FIG. 1 .- ANCIENT MANX SKULL FROM A CIST GRAVE.

received a cranium found in a cist in the Isle of Man. The position of the cist was east and west, suggesting Christian interment.

The calvarial part of the skull (Figs. 1 and 2) is nearly complete, comprising the frontal, parietal, occipital, and the left temporal bones.

As regards its actual texture and substance, the cranium is fairly well preserved (in comparison with skulls found in the gravels near Cambridge). It is a good deal flattened from above downwards, owing, as explained by Dr. Auden, to pressure exerted by the superincumbent slab of the cist. In consequence the occipital bone has been partially disarticulated.

The general appearance of the cranium suggests that it is that of a young adult, and probably a male, though some doubt exists as to the sex. The opinion here expressed is based on consideration of the exten-

sive air sinuses exposed above the inner part of the brow-ridges. But ridges for muscular attachments are not prominent, and consequently the occipital bone possesses feminine characters. Nor does the absolute size, as shown by the circumferential

measurement, aid determining the sex.

The chief features of the skull are as follows: In the proportion of breadth to length it is brachycephalic, and though not extremely short, it is more definitely so than most prehistoric British crania.

In the second place, the persistence of a suture between the two halves of the frontal bone is noteworthy. In most crania the two parts have fused, and the line of junction has

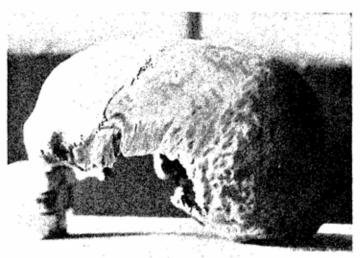


FIG. 2.—ANCIENT MANY SKULL FROM A CIST GRAVE.

been obliterated long before maturity. The exceptions are most frequent in crania, such as those of the white races, in which the frontal parts of the brain attain to the greatest relative size, and the broad frontal region of the present specimen is

in accord with this general statement.

This skull reminds me of one which I photographed and examined at Lübeck. It had been obtained from a dolmen (Figs. 3 and 4) at Blankensee near that town.

The University Museum possesses a skuil from the Isle of Man, which was found near Castletown. It forms part of the famous Thurnam Collection, and bears the



FIG. 3.—DOLMEN AT BLANKENSEE, NEAR LÜBECK.

following inscription:—"No. 237. Ancient Manx female, stone-lined grave (Cronk-y-"Keeillane), Isle of Man, September 1865."

This is a much smaller specimen, as will at once be evident from the comparison



FIG. 4 .- DOLMEN AT BLANKENSEE, NEAR LÜBECK.

the circumferential measurements, viz., 483 mm. as against 527 mm. in the former case. The specimens further differ in form, the female being the more narrow. It thus appears that the same range of variety of cranial form was present in the prehistoric period in the Isle of Man, as in other parts of Great Britain. I know of no means

of assigning these specimens to, for instance, a Scandinavian or a Celtic population. But at least it can be said of the specimen sent by Dr. Auden that it lacks the narrowness and the robustness, if that expression be permitted, of many male

Scandinavian crania, so that there is some reason for regarding it as more probably of Celtic affinities. This opinion is not modified by the fact previously mentioned of a certain resemblance between this skull, and that (Figs. 5 and 6) found in the dolmen



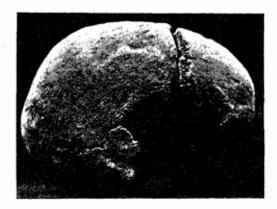


FIG. 6.-SKULL FROM DOLMEN AT BLANKENSEE.

FIG. 5 .- SKULL FROM DOLMEN AT BLANKENSEE.

at Blankensee in Holstein for the latter lacked precisely the characters of male prehistoric crania of the northern European races.

Measurements:—	nents:—			Cranium from "Cronk-y-Keeillane."
			****	
Maximum length	-	-	180	170
Maximum breadth	-	-	146	133
Horizontal circumferenc	e	-	527	483
Cephalic index -	-	-	81 · 11	$78 \cdot 25$
-				W. L. H. DUCKWORTH.

England: Archæology.

Cunnington.

Notes on Excavations at Oliver's Camp near Devizes, Wilts.\* By Mrs. M. E. Cunnington.

This small earthwork, known as Oliver's Camp, lies about two miles to the north of Devizes. Situated on one of the boldest promontories of the chalk escarpment of the north Wiltshire Downs, it commands a wide extent of country. To the south extends the long, straight escarpment of Salisbury Plain, to the westward may be seen the Mendips and the line of low hills stretching away to Bath, a little to the north of which it is possible, so it is said, to catch a glimpse of the Bristol Channel; quite to the north the view is cut off by a neighbouring spur of the Downs, and to the eastward stretch the Marlborough Downs. Scarcely ten miles away, in a straight line across the valley on the edge of Salisbury Plain, is Bratton Camp, and about four miles to the northward, but shut out from view by an intervening hill, is Oldbury Camp, perhaps the strongest hill fort in Wiltshire.

The land on which the camp is situate belongs to the Crown, and it was with permission of the proper authorities, and the kind acquiescence of the tenant, that excavations were undertaken this summer (1907) with the object of ascertaining, if

<sup>\*</sup> The excavations were carried out by B. Howard Cunnington, F.S.A., Scot., Devizes.

possible, something of the history of the place, and to what age and to what people the construction of the camp is due. The work was carried on for three weeks, and on an

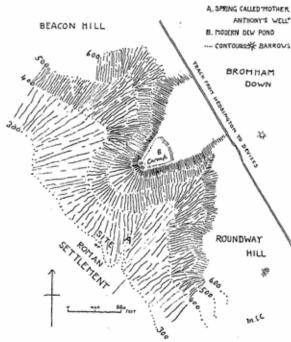


FIG. 1 .- PLAN OF SITE, ETC.

average six men were employed daily under the constant supervision of those responsible for the undertaking. The earlier antiquaries who have noticed the site have generally considered it to be Roman, but their guesses are of little value, and no attempt seems ever to have been made to unearth its history. Nor does there seem to be any record of "finds" in or near the camp that might have served as possible clues to the identity of any of its former occupiers.

The camp was more anciently called Roundway or Rundaway Castle, and its present name of Oliver's Camp or Castle seems to have arisen out of a popular tradition that Oliver Cromwell occupied, if he did not actually build, the camp. The only foundation in fact for this tradition is that the

battle of Roundway in 1643 was fought on the neighbouring Downs, when some of the combatants may have been posted close to, if not actually within, the boundary of

the camp. Cromwell himself was not present on the occasion, but the fact that Cromwellian troops fought on the adjacent Downs was quite enough to give rise in the course of time to the popular association of the camp with the name of the great man himself. Cromwell has always loomed large in the imagination of the people, and it has been said that he has achieved an unenviable notoriety only second to the Devil himself. In Devizes little school boys still get thumped and pinched if they do not wear oak leaves on May 29th, the day of the "glorious" restoration of King Charles II, a survival, no doubt, of the days when not only little school boys had a bad time if they were supposed to have leanings in favour of "old Noll" and his régime.

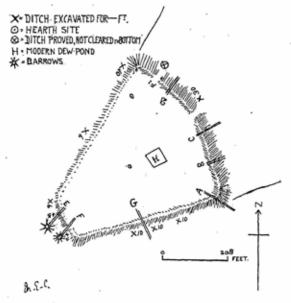


FIG. 2.-PLAN OF CAMP.

The spur or promontory of the Downs on which the camp stands runs nearly

east and west,\* narrowing almost to a point at the western end. The entrenchment, which consists of a single rampart and ditch, does not enclose the whole promontory but only about three acres at the outermost or western end. The eastern boundary of the camp is formed by an entrenchment thrown across the hill connecting together the entrenchments on the northern and southern sides, but leaving the larger portion of the promontory to the eastward open and undefended. On the northern and southern sides the entrenchment follows the line of the hill, but is not carried out to quite the extreme verge of the hill at the western extremity, where it cuts across the point from north to south, and the small piece of ground thus left unenclosed is occupied by two mounds, which have been proved to be barrows of the Bronze Age. The escarpment of the promontory is very steep, and the site is thus rendered naturally a strong one on every side, except on that towards the east, where the promontory abuts on the open downs. As might be expected on this side, left unprotected by Nature, the fortifications are strongest, and, although still composed only of a single rampart and ditch, the one is higher and the other is deeper than

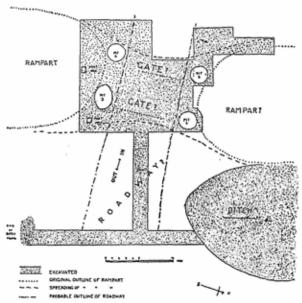


FIG. 3.—PLAN OF EXCAVATION AT GATE.

on either of the other sides. On this weak eastern side it seems as if there ought to be an outer entrenchment drawn for additional security nearer to the neck of land, and although there is now no visible sign of such entrenchment it is possible that there may have been one originally. A low bank and a shallow ditch might have become obliterated during many years of agricultural operations. This supposition seems to be somewhat strengthened by the fact that eastward of the present enclosure there are some indications of the former extension of the ramparts on the sides of the hill. The annexed plan of the camp will help to explain its construction, and at the same time to show the position and extent of the excavations.

A section (A) 6 feet wide was taken through the south-eastern angle of the rampart, where it was 6 feet high, measured from the crest to the top of the ancient turf line.

One section (C) 6 feet wide, and two (B and D) 4 feet wide, were cut through the eastern rampart, where its average height was 5 feet 6 inches.

On the south side a trench (G) 3 feet wide was taken from 30 feet within the camp, through the rampart and outer ditch, the height of the rampart here being 3 feet 6 inches.

The western rampart was cut by two sections 4 feet wide. At F the ground had been disturbed, and, as the ancient turf line did not show, the height of the rampart could not be determined. At E it was 1 foot 10 inches.

On the northern side the rampart is very slight, and was not excavated. The eastern ditch was cleared to the bottom for a length of 6 feet at C, and for a length

<sup>\*</sup> The position is actually south-west and north-east, but for brevity's sake the direct point of the compass is used throughout, thus the north-easterly rampart is referred to as easterly, and so on.

of 30 feet from its termination on the northern side of the entrance. The original depth of the ditch was from 13 feet to 14 feet,\* 11 feet to  $11\frac{1}{2}$  feet of which is now filled up. It had a width of about 22 feet at the top, and from 2 feet to 4 feet at the bottom.

A length of 30 feet was also cleared from the southern ditch, which was found to be 9 feet deep.

On the western boundary the ditch shallowed to  $5\frac{1}{2}$  feet, and on the northern side its average was  $6\frac{1}{2}$  feet, as shown by the three sections through it on that side.

The interior of the camp was carefully searched over for signs of pit-dwellings or for other habitations, but nothing of the kind could be traced.

Altogether forty-six trenches, varying in size from 4 feet by 2 feet to 30 feet by 20 feet, were dug at intervals over the whole area of the camp, wherever there seemed a likelihood of finding traces of habitation. These were all unproductive of satisfactory results, and in some places not even so much as a worked flint was turned out. The trenches in the angles at the north-east, south-east, and south-west, where the accumulation of soil was thickest, were rather less barren than those in the centre or at the sides. Five hearth sites were, however, discovered in the various sections; two under the rampart at B, one under the rampart at A, and the other two in the interior of the camp. These hearths consisted merely of a circular depression hollowed out of the solid chalk below the turf line, and in every case containing a quantity of charcoal and a few burnt flints. Two of those beneath the rampart and one in the centre of the camp also contained sherds of coarse pottery of Bronze Age type. This, together with the fact that three out of the five hearths were actually under the very centre of the rampart, seems to point to their being of rather earlier date than the camp itself. Perhaps they afford evidence of the occupation of the site before it was fortified. In this connection it is interesting to remember the presence of the two Bronze Age barrows just outside the entrenchments at the western extremity of the hill.

There is only one main entrance into the camp, and that is placed nearly in the centre of the eastern rampart. Before excavation it was thought that breaches in the rampart at F and F 1 also indicated entrances, but as the ditch was found not to be interrupted at either point they were, perhaps, not regular entrances; but there is some reason for thinking that they may have served as such if required. The entrance proved to be quite the most interesting structural feature brought to light during the work; its plan after excavation will illustrate its peculiar features. The two ends of the ramparts in the course of centuries had slipped inwards and actually overlapped one another over the roadway as indicated on the plan by a line of interrupted strokes. When the débris thus accumulated had been removed, the original outline of the rampart could be fairly well traced, and four remarkable holes or pits were discovered, two on either side at the base of the ramparts. The outer left-hand pit (No. 3 on plan) was oval in shape with a diameter of 3 feet one way and 4 feet the other, while the other three were circular with a diameter of 3 feet, and with an average depth of 3 feet. Measured from their centres the inner and outer pits were 71/2 feet apart, and 13 feet distant from each other across the entrance. They had been excavated out of the solid chalk with remarkably even and well cut sides, and had become entirely filled with loose chalk, apparently the result of the spread of the ramparts. This loose material readily came away from the smooth hard sides of the undisturbed chalk, so that there was no difficulty in ascertaining their original size and shape. From their position in relation both to each other and to the rampart, it seems clear that these pits must have been in some way connected with the gateway or barricades of the entrance, but what this connection was is not quite so obvious.

<sup>\*</sup> Where alternative figures are given it is to allow for slight variation in measurements at different points.

It has been objected that the pits are too large for mere post holes, but if they were intended to support the untrimmed trunks of trees their size is scarcely excessive. A few particles of decayed wood were actually found in Pit 1; that no trace of wood could be detected in either of the others is of little importance, as wood is known to disappear in chalk, often without leaving any visible trace behind.

The two small holes marked as post holes may or may not have been connected with the barricades: it will be seen that one of them is under the rampart. A hole of similar size and shape was found under the centre of the rampart at section D.

The ends of the ramparts slightly flank one another, and the roadway, as defined by the terminations of the ditch, enters the camp obliquely. The space between the two ends of the ditch is 26 feet in width; no trace of a paved or made road could be detected here or elsewhere in the camp. The section of this ditch as opened for a length of 30 feet on the right hand of the entrance was found to narrow slightly towards the entrance and to have a rounded termination with perpendicular sides.

It would be of great interest to compare the features of this entrance with those of the entrances of other similar camps, but, unfortunately, none seem to be recorded. For instance, Winkelbury Camp in South Wilts, excavated and described by General Pitt-Rivers,\* bears many striking resemblances to Oliver's Camp, and a very interesting comparison might be drawn between them. If the points of the compass were altered their situations on spurs of the Downs are practically identical, and a description of one might almost be equally applied to the other.

Winkelbury, it is true, is much more extensive, and has two outer entrenchments; but, as has been already suggested, there is some reason for thinking that Oliver's Camp may once have had some equivalent arrangement. As it appears at present Oliver's Camp represents the inner stronghold of Winkelbury. Their entrances are in similar positions, but, unfortunately, that of Winkelbury has not been excavated, so that the interesting point as to whether the likeness is carried out in detail is unknown.

The filling in of the eastern ditch at both its sections showed the same peculiar characteristics. As has been already stated, the ditch was originally from 13 feet to 14 feet deep, 11 feet to 111 feet being now filled up. For the first 5 or 6 feet from the bottom upwards this filling was found to consist of the usual chalky silt, intermingled, especially near the bottom, with large lumps of chalk, such as the rampart is built of, which no doubt rolled off into the ditch before the rampart had become coated with turf. Above this chalky silt, nearly a foot in thickness, was a very distinct band of dark, tenacious, clayey material, full of snail shells, and having every appearance of an old surface line. From immediately above this dark line the ditch was filled in with a loose gravelly chalk rubble, of the same character throughout, right up to the present turf line. Numerous snail shells were noticed throughout the uppermost two or three feet of earthy mixed silting in all the other sections of the ditches, but in this eastern ditch, except in the dark seam, which was indeed full of snail shells, there were none throughout this upper rubble filling-in. If this rubble had accumulated slowly like the silt in the other sections of the ditch, why were there no snail shells in it, and why were the snail shells confined to one narrow seam halfway down its depth?

Unlikely as it seems, one is forced to the conclusion that the upper portion of the ditch must at some period have been purposely filled in. In the first place, it is difficult to see how such a large accumulation of material could have found its way into the ditch by natural causes alone; and, secondly, why there should have been a pause in the process long enough to account for the dark band with snail shells. The chalky silt up to the dark line is clearly the result of weathering from the slope of the rampart and from the sides of the ditch itself. Until the rampart had become

coated with turf, and while the ditch continued to expose bare chalk sides to the weather, this silting process would necessarily be rapid, but once this process had so far come to an end as to allow thick turf to grow on the top of the silt, the silting into the ditch must have been very slow and slight. Why should it have begun again suddenly, and whence could the material have come? On one side the ditch is bounded by the rampart, which is composed of large lumps of chalk, entirely unlike the gravelly rubble in the upper portion of the ditch; on the outer side the land slopes away from, not towards, the ditch, so that the tendency to silt in from that side must always have been very slight. It is perhaps significant that Roman remains, including samian ware, and nothing of a later date, were found throughout this rubble to within a few inches of the surface. The explorers of Worlbury, that great pre-Roman stronghold on the Bristol Channel, came to the conclusion that the bulwarks there had been overthrown, and the ditch as far as possible filled up after the place had been taken by the Romans. May not in some degree a similar fate have overtaken this little Wiltshire stronghold? The easiest and most obvious way of filling in the ditch would have been to throw down the rampart into it, and as this was not done it has been suggested that the enclosure may have been found useful, perhaps for herding cattle, after the site was abandoned for military purposes. It seems also not improbable that the ditch was found to be dangerous to cattle from their liability to fall into it, and for this reason possibly it may have been found worth while to fill it in.

The relics found throughout the excavations were few in number and fragmentary; they did not include a single coin, only one nondescript fragment of bronze, two or three ambiguous pieces of iron, and, exclusive of one large pot found broken into many pieces, perhaps 100 potsherds. The potsherds found in trenching the interior are chiefly of Romano-British type, but some of them may be of late-Celtic origin. Fragments of Romano-British pottery and a few pieces of samian were found scattered throughout the rubble filling-in of the eastern ditch, and also to a depth of 3 feet in the southern and western ditches, but in no case in the deeper parts of the excavations. A few sherds of pottery were found on the ancient turf line beneath the ramparts; some of these are very rude and of Bronze Age type, but two pieces are of different and superior make, but do not appear to be Romano-British. Three sherds, apparently belonging to the same vessel, were discovered absolutely on the bottom of the deep eastern ditch, and must have found their way there before any silting had accumulated. This pottery also does not resemble either that which is usually regarded as typical of the Bronze Age or that of Romano-British make. In the lower silting of the southern ditch were found a quantity of sherds of somewhat similar character, all belonging to what must have been one large vessel of thick, red, well-baked pottery having the exterior surface tooled and polished. This pottery has been identified as undoubtedly Late-Celtic in character. Samian and Roman red ware were found on a higher level at the same spot.

These evidences of date, scanty in themselves, have an accumulative force, and can be summed up thus: Roman remains were found only in the upper filling-in and silting of the ditches, and nowhere beneath the ramparts or in the deeper excavations, while pottery that is distinct and superior to that of the Bronze Age was found at the bottom of the ditches, in the deeper excavations, and beneath the very centre of the ramparts.

The only reasonable interpretation of this evidence seems to be that the camp was built later than the Bronze Age, but before the advent of the Romans to this part of the country. The evidence, therefore, as far as it goes, would seem to assign the making of the camp to the people of the Late-Celtic period.

From the relic-hunter's point of view the results of the work at the camp might

perhaps be considered disappointing, but to those engaged in it the interest was very great, and, perhaps, the small contribution thus made to our all too scanty knowledge of British earthworks may not prove entirely valueless. The exploration of earthworks has for various reasons been neglected in the past far more so than the intrinsic interest of them has deserved. Some of the reasons for this neglect are obvious enough. Both time and patience are necessary before any impression can be made on even a small earthwork, and much labour may be expended without any very tangible results. It is so much simpler and more expeditious to cut into a barrow than to dig away at unproductive ramparts and to search for scanty fragments in the silt of ditches, that it is little wonder our knowledge of barrows is comparatively ample and of earthworks very meagre. The contents of many barrows had to be recorded before much light was thrown upon their history, so the examination of many earthworks is needed to help interpret the history of one. But the record of one in itself of no great importance may be both useful and valuable, in so far as it helps towards this common end.\*

M. E. CUNNINGTON.

### REVIEW.

Greece.

Murray.

The Rise of the Greek Epic. By Gilbert Murray, M.A., LL.B. Oxford: Clarendon Press, 1907. Pp. xi + 283. 23 × 14 cm. Price 6s.

The Rise of the Greek Epic is a subject that has seldom been treated by scholars who were also students of anthropology. Mr. Murray, in his lectures to the University of Harvard, not only brings to his theme the faculty of literary appreciation, and the taste of an accomplished master of verse, English and Greek, with the erudition of a profound and elegant scholar; he also studies the remote past of the "Ægean" or "Minoan" civilisation in the spirit of the anthropologist. theory of the rise of the Homeric epics is not mine; but I am here concerned only with his anthropology. On several points we are not of one mind; but in his remarks on the sacrifice of the ox (Odyssey, iii, 415-450), I thought his observations judicious and original. Why (ibid., iii, 444-450) do the ladies of Nestor's family "raise a wail" when the ox is slain? Mr. Murray says of Nestor's women that they "wailed aloud . . . as the Todas wail." The ox is the old sacred friend of the family, and, in Attica, the Bouphonia, or "ox-murder," with all its pretence of fear and guilt, is a clear survival of an age when cattle, as among the Todas, were more or less sacred. On the other hand, when the cattle of foes are slaughtered, in the Iliad, there is no wailing by the women who are captives themselves. The domestic wail for the domestic animal was clearly a survival. This theory appealed to me as being correct, when a friend, to whom I mentioned it-a friend whose knowledge of Homer is extensive—quoted Iliad, vi, 301; Odyssey, iv, 767, xxii, 411, as proof that the women's "wail" is really a cry of adoration or of triumph, while (Iliad, x, 294) in solemn sacrifice in time of war the horns of captured kine are gilded. Compare Merry's Odyssey, note to iii, 450.

I cannot follow Mr. Murray confidently as to totemism. Apollo of the shrew mouse (Apollo Smintheus) has been explained—by myself first, I think (Custom and Myth)—as a god who perhaps derives his name, and his association with shrew mice, from a mouse totem, or rather, a mouse tribal siboko. But perhaps the mouse was no totem, but a corn spirit, of which I knew nothing when I wrote. Mr. Murray writes, "In Greece itself some people who would rather have died than eat a mouse,

<sup>\*</sup> A fuller and more detailed account of the work done at Oliver's Camp will appear in the magazine of the Wiltshire Archæological and Natural History Society, January 1908.

" seem to have mingled with others who felt the same about lizards. Their gods were both identified with Apollo. When an avoider of mice found his friend eating mice freely near Apollo's temple, and meeting no condign punishment, he must naturally have been filled with religious anger."

Why? A savage of the mouse totem does not mind it when he sees a tribesman of the lizard totem eating mice. He sees no harm in that. But surely we have no right to suspect any Greek, in an age when Apollo already had temples, of eating shrew mice! To feed on any such small deer is a thing unknown to Homer. His men are so far from being totemists that, as Mr. Murray truly says, "the Achæan or northern spirit," the "Homeric tone of mind," "pruned away or ignored the special "myths, beliefs, and rites, that were characteristic of the conquered races."

Now like other words ending in inthos, sminthos, "a shrew mouse," is "pre-Hellenic." It is an unheard of thing that a kin should borrow a totem, and even if the earlier races of the Ægean—more civilised, Mr. Murray says, than the Achæans from the north—were none the less totemists when the Achæans came, the Achæans would not borrow totems from them. There may have been totemism in "the dark backward" of Greek society, but we cannot conceive that there were mouse and lizard kins in the late Minoan age, either among Achæans or among the people (whatever their language) whom they found dwelling in Knossos and Mycenæ.

Akin to what I cannot but regard as a case of "telescoping" two remote stages of culture into one is Mr. Murray's statement that while the Aryans, the Greeks, were in the patriarchal stage, with relationship counted on the male side, among "the "pre-Hellenic races" (the makers of Knossos and Mycenæ) "the father did not "count—at least not primarily—in the reckoning of relationship. He did count for something, since exogamy, not endogamy, was the rule."

I see no reason for supposing that a highly civilised race was in the same state of social organisation as the Euahlayi or the Kamilaroi, with exogamy and female descent, and below that of the Arunta. That they worshipped a maiden goddess, "the Korê," proves nothing; for tribes with female descent, known to us in Australia, worship no maiden goddess. Again, I do not feel sure that inheritance in the female line is proved by the many legends in which a hero marries the daughter of a foreign king and succeeds to the throne. Among the Picts this did, apparently, indicate female descent, but, in an age of wandering conquerors, marrying alien heiresses, like the Normans, the foreign brides were not of a race who practised female descent. Mr. Murray sees this (p. 45), but adds a note, "there is ground for suspecting that "descent in these" (pre-Hellenic) "communities went by the female side. . . ." The Norman case proves that no such suspicion is necessary. Moreover, after the Norman Conquest, the genealogies of Highland clans were altered, Skene says, in Celtic Scotland, just to be in the fashion, with a Norman marrying a Celtic heiress.

McLennan thought that he had proved the past existence of female descent for the Acheans, who were Aryans. He may have done so, but if he and Mr. Murray are both right, Greeks (Aryans) and pre-Hellenic peoples (not Aryans) were on a level in this matter. However, I think that we have no information as to the family, certainly none as to exogamy, among the supposed pre-Hellenic dwellers in Mycenæ and Knossos, if pre-Hellenic they really were. We can scarcely use our anthropological knowledge where nothing is known as to the family, unless Homer is right in attributing male descent to the family of Æolus. But, of course, Homer only describes society as he finds it in his own time, except in the one, or perhaps two, cases in which he mentions adelphic marriages.

The standing puzzle in Homer is the method of burial. The dead man is burned on a pyre, his bones are gathered (Iliad, xxiii, 229) and placed in a golden phiale or larnax, are bestowed in a stone chamber within a high cairn, and a stone pillar is

placed on the top of the cairn: all this in an age when weapons are of bronze, but tools, more usually, of iron. No cairn with such contents has been excavated; no such contents have been found in a cairn on Greek soil. I fear they never will be found, for the cairn and pillar were an advertisement and guide to tomb robbers.

Mr. Murray, on the other hand, supposes that cremation was practised under the conditions of the age of migrations, of which he gives a lively picture. The Achaean migration to Asia is ignored by Homer, but I do not dwell on that fact. Mr. Murray supposes that the wanderers in hostile lands burned their dead as "one perfect way " of saving your dead from all outrage. You could burn them into their ultimate " dust." But in Homer that is not done. The bones are carefully preserved. Again, the Homeric dead are not laid "in unknown and secret graves." What the heroes, from Hector to Elpenor, wanted was a conspicuous memorial. They got it, and the arrangements, far from concealing the bones and grave-goods (which were but seldom included), advertised the resting places of the warriors. The method, then, was not adopted for the sake of secrecy, as Mr. Murray suggests. It was not during migrations, but in the settled life at Knossos, that chamber tombs, shaft graves, and pit graves, attained secrecy in the order given. Out of forty-nine chamber graves, thirty-one; out of thirty-three shaft graves, eight; out of eighteen pit graves, one, had been robbed between the sack of the palace in a prehistoric age and the arrival of Mr. Arthur Evans (Prehistoric Tombs of Knossos, p. 103). On the other hand, the Royal Tomb of Iopata, marked by a considerable mound or cairn, "itself perhaps "crowned by some conspicuous stela or monument" (ibid., p. 140), had been thoroughly well sacked.

The Homeric method of burial is certainly that of an established people, which fears no desceration of its dead by enemies, though the Trojans might leap, as Agamemnon feared, on the cairn of Menelaus, if he died from the wound of the arrow of Pandarus.

This is the melancholy fact! We can scarcely hope to find intact Homeric cairus. They were too conspicuous to avoid being ransacked.

Mr. Murray's theory that the Achæans were κάρη κομόωντες, long-haired, because they were votaries, pledged not to cut their hair till they took Troy, is unconvincing. Long flowing locks are common in late Minoan art, at Knossos and on the cups of Vaphio, and in the representations of Minoan men on the tomb of Rekhmara, the Egyptian. Close-cropped hair is also common, but we have no reason to suppose that the bull hunters of Vaphio, or the envoys to Egypt, or the men looking on at athletic sports in Knossos, were all under vows. Achilles, to be sure, had vowed his πλόκαμον θρεπτήριον to the Spercheius at home, though he cut it off and laid it in the hand of the dead Patroclus (Iliad, xxiii, 141–152). But that was only one lock. The Achæans may have continued the Minoan custom of love locks, like the Spartans who fell at Thermopylæ. It is not necessary to argue against Mr. Murray's contention that the vow of the Achæans included celibacy. The reverse is conspicuously certain, in my opinion, if we take the poem as it stands.

Into the question of the bride-price I do not go; I have treated it in *Homer and his Age* (pp. 241-243). Questions about bronze, iron, and armour are archæological rather than anthropological, and Mr. Arthur Evans is against Mr. Murray, Reichel, and Robert. All the post-Homeric writers yield a much larger store of survivals from barbaric or savage life than Homer, whose taste was averse from contemplating "the disgusting details" of early magic and ritual, which are preserved by the later epic poets, the cyclics of the eighth century in Asia.

A. LANG.

#### ANTHROPOLOGICAL NOTES.

The third International Congress for the History of Religions will be held at Oxford from September 15 to 18, 1908. The meetings will be of two kinds. General meetings for papers or lectures of wider import, and meetings of sections for papers, followed by discussion. The sections will be eight in number. The hon. secretaries are Dr. J. Estlin Carpenter, 100, Banbury Road, Oxford, and Dr. L. R. Farnell, 191, Woodstock Road, Oxford, to whom applications for membership and offers of papers should be sent. All papers must be sent in by August 31st, and it will be a convenience if members desiring to read papers will inform the secretaries before May 31st.

A committee has been formed under the auspices of the Liverpool University to carry on excavation and research in Wales and the Marches. Among the subjects which may be expected to engage the attention of the committee in the first instance may be mentioned the following:—(a) The preparation of an archæological map of Wales and the Marches, on which all known sites and individual finds shall be marked, together with a bibliography and index of all known information respecting them.
(b) The execution of an archæological survey of the whole area, to supplement the recorded material, and complete the archæological map, so far as surface-evidence is concerned. (c) The consideration of a scheme of successive excavations on the sites which may be selected as of most crucial importance for the solution of the questions of distribution and historical sequence, which are certain to be raised by the pre-liminary survey and mapping. The work will be carried out in co-operation with the University of Wales and the Cambrian Archæological Society, and will be under the supervision of Professors Bosanquet, Garstang, Myres, and Newberry of Liverpool, and Professor Haverfield of Oxford.

THE output of anthropological literature has now reached such dimensions that any attempt to co-ordinate it and render it more accessible to students must be welcomed by anthropologists at large. The Bibliography of Anthropology and Folklore, containing works published in the British Empire, and published by a joint committee of the Royal Anthropological Institute and Folklore Society, should be of the greatest value to those engaged in research. It is proposed that it should be issued yearly, that for 1906, which has just been published, being the first of the series. It can be obtained at 3, Hanover Square.

An anthropological expedition, led by Mr. E. Torday and including Messrs. M. W. Hilton Simpson and N. H. Hardy, all Fellows of the Royal Anthropological Institute, left for the Congo Free State in October. The expedition, which is supported by the British Museum and the Institute, and has been promised all facilities on the part of the Free State authorities, aims at making an ethnographical survey of the country between the Upper Kwilu and Lulua.

Anthropologists will regret that the eighteenth report, published by Dr. W. E. Roth (Records of the Australian Museum, Sydney, N.S.W.), is to be his last contribution to Australian ethnography. After thirteen years' work in Queensland Dr. Roth has migrated to British Guiana, where, it is to be hoped, he will find opportunities for making as important contributions to anthropological science as hitherto in Australia.

Dr. C. G. Seligmann, F.R.A.I., left England in December for Ceylon, where he intends, on behalf of the Cingalese Government, to study the sociology of the Veddahs. He is accompanied by his wife.





Fig. 1.



Fig. 3.

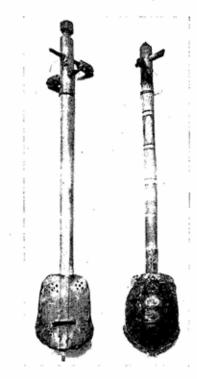


Fig. 2.

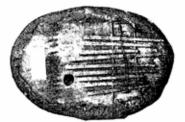


Fig. 4

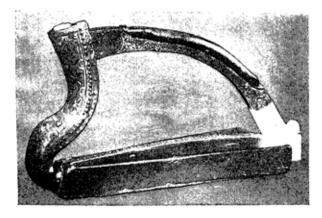


Fig. 5.



Fig. 6.

### ORIGINAL ARTICLES.

Music.

### With Plate B.

Ridgeway.

The Origin of the Guitar and Fiddle. By Professor William Ridgeway, F.B.A.

It has long been recognised that the origin of many of our best-known musical instruments is to be found in the primitive shooting bow, and some even hold that to this primitive weapon all our stringed instruments are to be referred. At the Oriental Congress in 1892 the late Dr. van Landt of Leyden showed that the earliest musical instrument used by the Arabs was their bow, the string of which was twanged to accompany their war songs, as they marched to battle. Mr. Henry Balfour\* has traced the various developments of the "musical bow," showing the different modifications of the original shooting bow obtained by the addition of a resonator or sounding board. The present paper is an attempt to deal with one class of instruments left untouched by previous writers, as far as I am aware.

There can be no doubt that both the harp of northern Europe and the conventional

lyre of Greece were both evolved from the shooting bow, which was bent up, the place of the string being taken in each case by a wooden crosspiece, the strings being stretched from this crosspiece to the body of the bow. From this point onwards there were two distinct lines of development. In the case of the northern harp the bow was bent up until it virtually assumed a V-shape, and with the addition of the



FIG. 7.-LYRES ON GEMS IN BRITISH MUSEUM.

crosspiece instead of the original bow-string it practically became triangular, although one side of it retained the curve of the original bow, the other side being straight.

By the addition of a resonator was reached the mediæval form of northern harp, such as the ancient specimen preserved in the library of Trinity College, Dublin, popularly known as the harp of Brian Boru, but really dating from a far later period, and having once belonged to the great house of O'Neill, as is proved by its silver badge (Pl. B., Fig. 5†). In south-eastern Europe and in Phrygia, whither it had probably been brought by the Phryges when they emigrated from Europe, we meet the completely triangular form known to the Greeks as the "triangle" (τρίγωνον) or the "Phrygian triangle,"‡ which is often seen on Greek works of art (Fig. 7).§ This type shows no resonator.

<sup>\*</sup> The Musical Bow (Oxford, 1899).

<sup>†</sup> By kind permission from a photograph by Sir Benjamin Stone, F.S.A.

I Soph. Fr. 361 : πόλυς δὲ φρὺξ τρίγωνος; cf. Ath. 183 f.

<sup>§</sup> Brit. Mus., Cat. of Gems, No. 555.

In the other line of development the primitive bow does not become triangular but retains its curved form, as is seen in the typical Greek lyre (Figs. 7, 8, 9). The curving sides and back of the bow are plainly there, and the horns of the instrument are simply those of the bow, the Greek name  $(\pi \eta \chi \epsilon \iota \epsilon)$  being the same in each case. The string, as in the northern harp, is replaced by a crosspiece called the "yoke"  $(Z \dot{\nu} \gamma o \nu)$ , the strings being stretched from the crosspiece to the back of the bow, not to one of the sides as in the "triangular" harps. The back of the bow in this case was later furnished with a resonator or sounding-board, which forms the foot of the conventional Greek lyre, such as that seen on certain Macedonian coins. This sounding-board is closely connected with the famous story relating to the invention not of the lyre, but of one type of lyre known as the chelys. When Apollo came







FIG. 10 .- FROM A VASE.



FIG. 9.—FROM A VASE.



FIG. 11 .- FROM A VASE.

the land of the Hyperboreans, who dwelt beyond the "shady sources of the Danube," he brought with him his northern harp On his arrival (kithara). in Thessaly with his great herd of cattle, Hermes, the aboriginal god of Arcadia, made a cattle raid into Thessaly and lifted the kine of the northern god. latter gave chase captured the thief in his own home in Arcadia. Now on the day of his birth Hermes had sallied forth and found a dapple-backed tortoise spraddling along as it fed before the house. The precocious babe killed the tortoise and forthwith stretched reeds across its shell and made an instru-"tortoise" called (χέλυς), termed also "tortoise" (testudo) by the Romans, but commonly spoken of as a lyre (λύρα). The enraged Apollo demanded requital from the

hief, and thereupon Hermes presented him with his newly-invented instrument. Apollo was so delighted with it that he forgave the culprit and henceforward he made him his brother and shared with him all his own prerogatives save that of prophecy.

The chelys of Hermes had no neck or projecting arm, for it simply consisted of a tortoise-shell with reeds or strings stretched across it. This work does not occur on works of art, though the lyre immediately evolved from it is often seen in Greek wase painting (Figs. 8, 10), the resonator beyond doubt being a tortoise-shell. Exactly

the same instrument as that of Hermes is at this moment in use amongst some of the tribes on the Congo. It is formed of the back of a tortoise with a piece of skin stretched tightly over it, the whole acting as a resonator to the notes fastened across it (Pl. B., Fig. 4\*) as is the way in the common Kaffir organ.

The reason why Apollo, the northern god, is represented in the legend as so readily propitiated by the *chelys* of Hermes is that the northern peoples had no natural sounding-boards ready to hand, for the harp, as already stated, was only a form of the

There does not shooting bow. appear to have been any original stringed instrument made with a sounding-board north of the Alps, since there was no natural sounding-board there. But, on the other hand, in the Mediterranean basin there was a natural sounding-board in the shell of the tortoise, as we have just seen in the myth of Hermes. Again, all over Africa at the present moment stringed instruments with resonators formed of tortoise-shells or gourds, or with those of wood, imitating the tortoise or the gourd, are extremely common. We have just seen the tortoise instrument from the Congo (Pl. B., Fig. 4). From a round gourd or the round end of an oblong gourd came the banjo (Pl. B., Fig. 3), which was brought into America by the slaves imported from West Africa, whilst from the oval-shaped gourd came the familiar mandolin. The last two have been considered simply as cases of the primitive shooting bow fitted with a gourd resonator. But in such instruments we have rather a blending of two original types :- (1) The shooting bow and (2) the shell or gourd simply used as a resonator without any projecting arm, the strings being simply stretched from the edges of the shell or gourd, as in the Congo instrument (Pl. B., Fig. 4). In



FIG. 12.—PRIMITIVE BAHIMA INSTRUMENT FROM A TORTOISE PROTOTYPE.

the most primitive forms of these instruments the strings were not formed of separate pieces of sinew or gut, but one long string, passed up and down through notches at either end of the shell or gourd, formed all the notes, the tuning being effected by pulling tight the string throughout its many laps. I show here (Fig. 12) an excellent specimen of this instrument formerly used by the women of the Bahima tribes of

<sup>\*</sup> This specimen is in the Cambridge Anthropological Museum, as is also Pl. B., Fig. 3.

Uganda. It was obtained for the Cambridge Anthropological Museum by my friend, Rev. J. Roscoe. In the shape of the wooden sounding-board the original tortoise type survives.

There is no doubt that a primitive form of the bow was used in Ancient Egypt; this was fitted with a tortoise or gourd resonator, from which arose a primitive mandolin, such as that seen in a Cypriote figurine dating from about 800 B.C., purchased by Professor Flinders Petrie in Egypt. That the Egyptians used tortoise shells for this purpose is proved by the remains of such an instrument made of tortoise-shell in the Egyptian Department of the British Museum.

It is not improbable that this primitive modification of the bow gives us the real meaning of the curious passage in 2 Samuel, i. 17, where we read that David made his lament for Saul and for Jonathan his son. Also he bade them teach the children of Judah the use of the bow, or teach them the bow, as it is in the original. But as the shooting bow had been the chief weapon of all the Semites from the earliest times, it is most improbable that David had the children of Judah taught archery for the first In any case, even if this were so, this piece of information comes in very awkwardly. Again, it has been commonly explained that "the bow" is the name of the lament which follows, because the word bow occurs in it. But as the shield, the bow, and the sword, are all mentioned, and as the shield occurs first in the enumeration, if the passage was to be called after some defensive or offensive arm it might as well have been called the shield or the sword, and more especially the former, as it comes first in order. On the other hand, if it means that David had taught the modified form of bow which at that time was already commonly in use in Egypt as an accompaniment for war songs and laments, it is most appropriate in its present place. Moreover, it explains the statement in the prophet Micah that David was an inventor of musical instruments.

The primitive form, as we know it in ancient Egypt, was gradually developed until it reached the shape now in use amongst the Dinkas on the Upper Nile, whilst it is well known in a still more highly elaborated form, now become a ship, on the coast of the Indian Ocean (Pl. B., Fig. 1\*).

The Dinka type has indentations in its sides analogous to the waist of the guitar and fiddle. It is quite possible, and even probable, in face of the fact that tortoise-shells were certainly used for sounding boards in ancient Egypt, that this Dinka form has come rather from the tortoise than from the gourd.

Let us now return to the Mediterranean and the myth of Hermes. If it be said that the story of the use of tortoise-shell for resonators by the Greeks is merely a fable, it can be at once shown that down to a late period the Greeks continued to use a musical instrument made out of tortoise-shell and constantly termed a lyre  $(\lambda \nu \rho a)$ . Thus Pausanias, who travelled through Greece about a.d. 180, tells us that in the forests on Mount Parthenius in Arcadia (the very land where Hermes was said to have invented the chelys) there were tortoises of large size as well suited for making lyres as those brought from India. This proves that instruments made of tortoise-shell were in use in Greece down to comparatively late times, and though I am unable to show that they are still in use in that country, such still survive in regular use on the southern shores of the Mediterranean. Pl. B., Fig. 2, shows two little guitars: One is used by the natives in Algeria;  $\dagger$  it has but two strings and its sounding board is made of a tortoise-shell. The other, which has three strings, is from Casa Blanca, in north-west Morocco, whilst similar ones are regularly in use amongst the minstrels of Tangiers. It will be

<sup>\*</sup> From a specimen in my wife's possession.

<sup>†</sup> The Algerian specimen was given to me by my old pupil, Mr. W. J. Farreell, Fellow of Jesus Coll., Camb.; that from Casa Blanca by my old pupil, Mr. Clement Gutch, lecturer of St. John's. Coll., Camb.

seen that each of these sounding boards has a waist, owing to the natural conformation of the tortoise-shell. In this natural waist of the tortoise, the primaval sounding
board of the Greeks and other people of the Mediterranean, I venture to suggest that
we have the starting point of the familiar waist of the guitar and fiddle. If it be
said that the waist in the fiddle is simply the outcome of an effort to obtain greater
freedom for using the bow, the answer at once is that the guitar, in playing which no
bow is used, has a similar waist. It may be said that the little rude instruments of
Algiers and Morocco are only modern imitations of guitars, but we have just produced
the strongest evidence for the use of the tortoise-shell for a sounding board in Egypt
and in Greece long before the guitar and fiddle had been evolved.

We may therefore conclude that (1) in upper Europe there were instruments derived simply from the bow of the archer; (2) that below the great mountain chain in the Mediterranean basin the tortoise supplied a natural sounding board as in Greece and Italy, and that from it was evolved a musical instrument quite independent of the shooting bow; (3) that from the tortoise with its slightly indented sides has arisen the characteristic waist of the guitar and fiddle, both admittedly products of Mediterranean lands, the original tortoise-shell instrument with its strings simply stretched across the shell, as in the example from the Congo, was supplemented by a short neck, which need not have been suggested by the shooting bow, since the earliest known have very short necks (Pl. B., Fig. 6. Fragment of the roof of St. Mary's Abbey, York, from a photograph by my friend, Dr. G. Auden, of York); (4) in Africa both tortoiseshells and gourds have been widely employed since very ancient times, either independently of the shooting bow, as in the Congo specimen, or fitted on to the archer's bow to serve as resonators, as in the ancient Egyptian instrument and in the modern African bomba, and its developments on the Nile and on the shores of the Indian Ocean, which may have come either from a gourd or a tortoise-shell, a form familiar to us in the mandolin; (5) it is certain that the banjo with its circular resonator has been developed out of a circular gourd or the circular end of an oval one.

WILLIAM RIDGEWAY.

#### Australia.

Frazer.

The Australian Marriage Laws. By J. G. Frazer.

When my esteemed friend Dr. A. W. Howitt was in England a few years ago for the purpose of seeing his book, The Native Tribes of South-East Australia, through the press, I had the privilege of entertaining him in my house at Cambridge for several days. Our conversation naturally turned much on the Australian aborigines, and in the course of it I observed that the effect of the division of the community into two exogamous sections or classes was to prevent the marriage of brothers with sisters, and that the effect of the division of the community into four exogamous sections or sub-classes (with the characteristic rule of descent) was to prevent the marriage of parents with children. The observation seemed to me of great importance, indeed to go to the root of the Australian marriage system. But, so far as I can trust a treacherous memory at this distance of time, I was under the impression that this view of Australian exogamy was Dr. Howitt's own, and accordingly I was somewhat surprised when, on my mentioning it, he received it as one which had not occurred to him before. But with characteristic candour he welcomed it as true and recorded it with approval in his book, assigning to me the credit of the observation (The Native Tribes of South-East Australia, pp. 284-286). Hence I supposed that my original impression as to Dr. Howitt's view must be wrong, and since then I have flattered myself with the belief that I had made a discovery of some importance.

But to-day (January 2nd, 1908) in looking over an old paper of Dr. Howitt's (Notes on the Australian Class Systems, Journ. Anthr. Inst., Vol. XX., 496 sqq.),

I find that my first impression was right, and that as far back as 1882 Dr. Howitt had clearly perceived and clearly stated that the effect and the intention of the successive bisections of an Australian tribe was to prevent, first, the marriage of brothers with sisters, and, second, the marriage of parents with children. To quote only his conclusion he suggests as "a reasonable hypothesis" that "(1) The primary "division into two classes was intended to prevent brother and sister marriage in the "commune. (2) The secondary divisions into sub-classes were intended to prevent "the possibility of inter-marriage between parents (own and tribal) and children" (op. cit., p. 504).

I have little doubt that this passage was the source of my impression that Dr. Howitt held the view so lucidly stated in it, but I may perhaps be excused for having forgotten it, since it appears that the passage had equally escaped the memory of Dr. Howitt himself. It is with sincere pleasure that I am thus able to disclaim for myself, and to assign to Dr. Howitt, the merit of having first perceived and pointed out what I firmly believe to be the truth as to the origin of exogamy in Australia. As no man has done so much as he by his writings and his influence to make known the facts of the Australian marriage system, it is fitting that to him should fall the honour also of explaining them. That his explanation will in time be universally accepted as the true one I entertain no doubt.

J. G. FRAZER.

Folklore. Westermarck.

The Killing of the Divine King. By Professor Edward Westermarck, Ph.D.

As all anthropologists know, there are various instances recorded of man-gods or divine kings being put to death by their worshippers. Equally well known is the explanation of this custom which has been suggested by Professor J. G. Frazer. Primitive people, he observes, sometimes believe that their own safety and even that of the world is bound up with the life of one of these god-men or human incarnations of the divinity. They therefore take the utmost care of his life out of a regard for their own. But no amount of care and precaution will prevent the divine king from growing old and feeble and at last dying. And in order to avert the catastrophes which may be expected from the enfeeblement of his powers and their final extinction in death, they kill him as soon as he shows symptoms of weakness, and his soul is transferred to a vigorous successor before it has been seriously impaired by the threatened decay. But some peoples appear to have thought it unsafe to wait for even the slightest symptom of decay and have preferred to kill the divine king while he is still in the full vigour of life. Accordingly they have fixed a term beyond which he may not reign, and at the close of which he must die, the term fixed upon being short enough to exclude the probability of his degenerating physically in the interval. Thus it appears that in some places the people could not trust the king to remain in full bodily and mental vigour for more than a year; whilst in Ngoio, a province of the ancient kingdom of Congo, the rule obtains that the chief who assumes the cap of sovereignty one day shall be put to death on the next.\*

Every reader of The Golden Bough must admire the ingenuity, skill, and learning with which Dr. Frazer has worked out his theory, even though they may fail to find the argument in every point convincing. It is obvious that the supernatural power of divine kings is frequently supposed to be influenced by the condition of their bodies. In some cases it is also obvious that they are killed on account of some illness, corporal defect, or symptom of old age, and that the ultimate reason for this lies in the supposed connection between physical deterioration and waning divinity. But, as Dr. Frazer himself observes, in the chain of his evidence a link is wanting: he can produce no

direct proof of the idea that the soul of the slain man-god is transmitted to his royal successor. In the absence of such evidence I venture to suggest a somewhat different explanation, which seems to me more in accordance with known facts—to wit, that the new king is supposed to inherit, not the predecessor's soul, but his divinity or holiness, which is looked upon in the light of a mysterious entity, temporarily seated in the ruling sovereign, but separable from him and transferable to another individual.

This medification of Dr. Frazer's theory is suggested by certain beliefs prevalent among the Moors. The Sultan of Morocco, who is regarded by the people as "the vicegerent of God," appoints before his death some member of his family-by preference one of his sons—as his successor, and this implies that his baraka, or holiness, will be transferred to the new sovereign. But his holiness may also be appropriated by a pretender during his lifetime, which proves that it is regarded as something quite distinct from his soul. Thus, sometime ago, the people said that the recent pretender, El Rogui, had come into possession of the Sultan's baraka, and that he would subsequently hand it over to one of the Sultan's brothers, who was then denied his liberty. Like the sultans of Morocco, the divine Kafir kings of Sofala, who were put to death if afflicted with some disease, nominated their successors.† In ancient Bengal, again, whoever killed a king and succeeded in placing himself on the royal throne, was immediately acknowledged as king; the people said, "We are faithful to the throne, "whoever fills the throne we are obedient and true to it."! In the kingdom of Passier, on the northern coast of Sumatra, where the sacred monarch was not allowed by his subjects to live long, "the man who struck the fatal blow was of the royal lineage, " and as soon as he had done the deed of blood and seated himself on the throne " he was regarded as the legitimate king, provided that he contrived to maintain " his seat peaceably for a single day." In these cases, it seems, the sanctity was considered to be inherent in the throne and to be partly communicated to persons who came into close contact with it.§

Now, holiness is a quality which is generally held to be exceedingly susceptible to any polluting influence, and this would naturally suggest the idea that, in order to remain unimpaired, it has to be removed from a body which is defiled by disease or blemish. Such an idea may be supposed to underlie those cases in which even the slightest bodily defect is a sufficient motive for putting the divine king to death. It is of the greatest importance for the community that the holiness on which its welfare depends should not be attached to an individual whose organism is no longer a fit receptacle for it, and who is consequently unable to fulfil the duties incumbent upon a divine monarch; and it may be thought that the only way of removing the holiness from him is to kill him. The same explanation would seem to apply to the killing of kings or magicians who have actually proved incapable of bringing about the benefits expected from them, such as rain or good crops, although in these instances the murderous act may also be a precaution against the revenge they might otherwise take for being deposed, or it may be a punishment for their failure, or have the

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<sup>\*</sup> Frazer, Golden Bough, ii., 56. † Ibid., ii., 10. Į Ibid., ii., 16.

<sup>§</sup> Since the above was written, Dr. Frazer himself has kindly drawn my attention to some statements in his *Lectures on the Early History of the Kingship* (p. 121 sqq.), from which it appears that in some parts of the Malay region the regalia are regarded as wonder-working talismans or fetishes, the possession of which carries with it the right to the throne. Among the Yorubas of West Africa a miraculous virtue seems to be attributed to the royal crown, and the king sometimes sacrifices sheep to it (ibid., p. 124, n. 1).

Frazer, Golden Bough, i., 158 sq.; Landtman, Origin of Priesthood, p. 144 sqq.

<sup>¶</sup> Landtman, op. cit. p. 144. Divine animals are sometimes treated in a similar way. In ancient Egypt, if the sacred beasts could not, or would not, help in emergency, they were beaten; and if this measure failed to prove efficacious, then the creatures were punished with death (Wiedemann, Religion of the Ancient Egyptians, p. 178; Idem, Herodots zweites Buch, p. 428 sq.).

character of a sacrifice to a god.\* Moreover, the disease, weakness, or physical deterioration of the king might cause his death; and, owing to the extremely polluting effects ascribed to natural death, this would be the greatest catastrophe which could happen to the holiness seated in him. The people of Congo believed that if their pontiff, the Chitomé, were to die a natural death, the world would perish, and the earth, which he alone sustained by his power and merit, would immediately be annihilated; hence, when he fell ill and seemed likely to die, the man who was destined to be his successor entered the pontiff's house with a rope or a club and strangled or clubbed him to death. Similar motives may also have induced people to kill their divine king after a certain period, as everybody is sooner or later liable to fall ill or grow weak and die. But I can also imagine another possible reason for this custom. Supernatural energy is sometimes considered so sensitive to external influences that it appears to wear away almost by itself in the course of time. I have heard from Arabs in Morocco that a pretender's holiness usually lasts only for half a year. And it may be that some of the divine kings mentioned by Dr. Frazerwere exposed to a similar fatality and therefore had to be slain in time.

EDWARD WESTERMARCK.

#### Australia.

Mathews.

# Social Organisation of the Ngeumba Tribe, New South Wales. $By \ R. \ H. \ Mathews.$

In my book, Ethnological Notes on the Aboriginal Tribes of New South Wales and Victoria, there is given a brief account of the sociology of the Ngeumba tribe, in which I reported the existence of certain castes provisionally called Blood and Shade divisions. In order to obtain the application of these castes to the social organisation of the tribe it was necessary to prepare the pedigrees of several families to illustrate the laws of intermarriage among the castes as well as the descent of the progeny in them. I did not at the time publish the genealogies, because I had more than sufficient information to satisfy myself, and I thought it unnecessary to do any more. Since the publication of my book and its circulation among the ethnologists of England, some of the latter have asked me to furnish these genealogies, so that scientific men may have an opportunity of forming their own conclusions from my observed facts. I am therefore now submitting a table of some of the genealogies for publication by the Royal Anthropological Institute in Man. (See Table II.)

Before proceeding with the genealogies it will be desirable very briefly to repeat some particulars respecting the cycles and sectional divisions, for the purpose of bringing the whole matter together. The following is a synopsis of the Ngeumba social divisions:—

TABLE I.

CYCLE.	MOTHER.	FATHER.	Son.	DAUGHTER.	
Ngurrawun{	Butha	Muri Kubbi	Ippai Kumbo	Ippatha. Butha.	
Mümbun	Kubbitha Matha	Ippai - Kumbo	Murri Kubbi	Matha. Kubbitha.	

O See Westermarck, Origin and Development of the Moral Ideas, i., 443.

<sup>†</sup> Frazer, Golden Bough, ii., 8.

The women of the tribe are classified into two cycles, Ngurrawan and Mümbun-Each cycle is divided into two sections as above, which reproduce each other in perpetual alternation. The totems remain constantly in the same cycle as the women and are accordingly transmitted from a mother to her offspring. Besides the foregoing divisions, and quite independently of them, there is another bisection of the community into Guaigulir and Guaimundhun, which may be rendered Active blood and Sluggish blood. There is yet another division of the people into Nhurrai, the shade thrown by the butt or lower portion of a tree, and Winggu, the shade cast by the higher branches or the outer margin of the shadow. These divisions are apparently an extension of the Blood and Shade castes, and regulate the camping places of the natives under umbrageous trees. A Guaigulir is always a Winggu and a Guaimundhun is always a Nhurrai. The middle portion of the shadow of a tree is called Wangue (see my book, pp. 7 and 8).

The castes of Blood and Shade are not necessarily coincident with the other partitions and repartitions. For example, each cycle, every section and every totemic group contains people belonging to the Guaigulir and Guaimuudhun Bloods, with their corresponding Shades. As regards descent, a Guaigulir mother has a Guaigulir family of the Winggu Shade, and a Guaimuudhuu mother's children take her Blood and Shade, just in the same way that an Emu woman's family are Emus like herself.

The normal and general practice is for each pair of divisions to intermarry: A Ngurrawun marries a Mümbun, a Guaigulir a Guaimundhun, and a Nhurrai mates with a Winggu, but these general laws are subject to modifications. Sometimes a Ngurrawun espouses a Ngurrawun, a Guaigulir marries a Guaigulir, and a Nhurrai takes a Nhurrai partner. The only law of the Ngeumba sociology which admits of no variation is that the cycles, sections, totems, bloods and shades are transmitted through the women only.

I now add short pedigrees of six couples or twelve married persons belonging to the southern portion of the Ngeumba territory. Every one of these persons was examined by myself, and I further checked their statements by inquiries from their relatives and others who knew them well. I am giving the English names of my native informants, so that it will be quite a simple matter for any one to go out and check my report.

Observing Table II. we find all the individuals we are dealing with in the central column. No. 1, Jack Onze, who is an Ippai, and a Guaigulir (contracted to G'lir). His wife, No. 1A, Nellie Onze, a Matha and a Guaimundhan (contracted to G'dhun), is in the next line. In the next column to the right of Jack and Nellie is their child Kubbi, the same Blood and Shade as his mother. On the left of No. 1 is Jack Onze's mother, an Ippatha, having the same Blood and Shade as himself. In the extreme left-hand column is Jack Onze's father, a Murri and a Guaimundhun. All the other married pairs can be followed at sight in the same way. I have not encumbered the table with the Shade of any person, because in every instance yet met with a Guaigulir is always a Winggu and a Guaimundhun a Nhurrai. Neither have I added the totems, which invariably follow the mother.

I have adopted what appears to me to be the simplest form of recording a person's pedigree, one remove backward and one forward, making three generations, so that the merest tyro can understand the table. I have done this for the purpose of encouraging station owners, police officers, teachers, and others who have opportunities to make further inquiries. If we overwhelm a beginner with elaborate genealogical tables he may give the work up, especially if he is not very keen upon it. I am desirous of inducing other workers to enter the field of Australian anthropology.

It will be seen by the following table that although most of the marriages are normal or mixed blood, as Guaigulir to Guaimundhun, there are some irregular or

the same blood. We also notice examples of the well-known variations in the intermarriages of the sections, such as in one case Murri marries Ippatha, in another Butha, and in another Matha. Members of the Guaigulir and Guaimundhun Bloods are found indiscriminately in all the sections, and consequently in both the cycles. In all the examples, however, the child takes the Blood caste from the mother. The old blacks cannot give a reason for the Blood castes any more than they can give a reason for the divisions into cycles or sections, or for the origin of the totems. Table II. is but a small instalment of the genealogies of the Bloods and Shades contained in my note-books, which will perhaps be published on another occasion.

Futher of Individual.		Mother of Individual.		Individual Answering the Questions.				Child of Individual.		
Section	n.	Blood.	Section.	Blood.	No.	Proper Name.	Section.	Blood.	Section.	Blood.
Murri		G'dhun -	Ippatha -	G'lir -	1	Jack Onze -	Ippai -	G'lir -	} <sub>Kubbi</sub> -	G'dhun.
Kumbo	-	G'dhun -	Kubbitha	G'dhun -	1.4	Nellie Onze -	Matha -	G'dhun -	3	or oration.
Murri		G'lir -	Buths -	G'dhun -	2	Tom Draper -	Ippai -	G'dhun -	2	a
Kumbo		G'dhun -	Kubbitha	G'dhun -	2▲	Nanny Draper -	Matha -	G'dhun -	Kubbi -	G'dhun.
Murri		G'lir -	Butha -	G'lir -	3	Jack Charlton -	Ippai -	G'lir -	}	a.n.
Kumbo		G'dhun -	Matha -	G'dhun -	31	Mary Charlton -	Kubbitha	G'dhun -	Murri	G'dhun.
Murri	-	G'dhun -	Butha -	G'dhun -	4	Tom Keegan -	Ippai -	G'dhun -	2000	G133
Kumbo	-	G'lir -	Kubbitha	G'dhun -	4.1	Norsh Keegan -	Matha -	G'dhun -	Kubbi -	G'dhun.
Unobtainable.			5	Jack Trap -	Kumbo -	G'lir -	Z.,			
Ippai	-	G'dhun -	Matha .	G'lir -	5д	Kitty Trap -	Kubbitha	G'lir -	Murri -	G'lir.
Kumbo		G'dhun -	Kubbitha	G'dhun -	6	Billy Coleman -	Murri -	G'dhun -	D	
Kumbo		G'dhun -	Kubbitha	G'lir -	64	Mary Ann Cole-	Matha -	G'lir -	Kubbi -	G'lir.

TABLE II.

An old black fellow once told me that if a Guaigulir man marries a Guaimund-hun woman they are not supposed to quarrel with each other; but if two persons of the same Blood marry, they can quarrel and fight as much as they like, and no one will interfere. He said, moreover, that all Guaigulir men are friendly amongst themselves, and the Guaimundhun men have the same mutual bond of friendship, much in the way that totems men acknowledge a common tie.

R. H. MATHEWS.

#### REVIEWS.

# Anthropology.

# Balfour, Crawley and Others.

Anthropological Essays presented to Edward Burnett Tylor in Honour of his Seventy-fifth Birthday, October 2, 1907. By H. Balfour, A. E. Crawley, D. J. Cunningham, L. R. Farnell, J. G. Frazer, A. C. Haddon, E. S. Hartland, A. Lang, R. R. Marett, C. S. Myers, J. L. Myres, C. H. Read, Sir J. Rhŷs, W. Ridgeway, W. H. R. Rivers, C. G. Seligmann and T. A. Joyce, N. W. Thomas, A. Thomson, E. Westermarck; with a bibliography by Barbara W. Freire-Marreco. Oxford: Clarendon Press, 1907. Pp. viii + 416. 28 × 19 cm. Price 15s.

The impression of the present writer, rightly or wrongly, is that a good many people in England, if asked, would declare themselves as not very greatly enamoured of the Festschrift idea, from which the present volume has sprung. It seems to have an air, so to speak, of something non-indigenous, something exotic. Indeed, the notion of stringing together at haphazard—for this is, after all, the effect of the alphabetic order—a number of totally disconnected, one might almost say random, essays on

anthropology, all of which would probably at some time or other have found their way into print elsewhere, does not appear to be a course presenting any very great advantage. Yet in this case we are constrained to admit that the type, format, and general appearance of the volume are worthy of the occasion, that the contents in themselves are well calculated to disarm criticism, and reflect the highest credit upon the enterprise and ability with which the volume has been edited.

In these gleanings are associated, as the joint editors say in their preface, "both "those who contribute to the volume and others who from lack of opportunity were "unable to lay a gift before the greatest of English anthropologists." Whatever special reason might be found for entrusting this review to the present writer may be due to the fact that he, too, is one of those whose work as an author was encouraged and influenced from the first by Tylor. Being at the same time one of those mentioned in the preface as prevented from participating in the movement at an earlier stage, he is glad nevertheless to have this opportunity of definitely associating himself therewith.

All who have contributed to the volume have given of their best, and the writer feels that it would partake of an appearance of ungraciousness were he to attempt to criticise in this place work which has so evidently been a labour of love. At the same time, in order to obtain from this generous vintage the richest possible yield, it may be useful to give a brief descriptive summary of the contents, grouping them as far as possible under the general subject headings to which they naturally belong and under which they might perhaps have been more profitably arranged.

Ethnography and Ethnology.—This section contains a carefully considered paper, by Mr. Henry Balfour, on "The Fire-Piston," first as a scientific toy in use in various parts of civilised Europe, and secondly as a useful appliance found amidst an environment of lower culture in the East. It extends sporadically over a wide area from North Burma and Siam through the Malay Peninsula and Malay archipelago to its eastern limits in the islands of Luzon and Mindanao in the Philippines.

One of the most original papers in the collection is that on "The Ethnological Study of Music," by Dr. C. S. Myers. The aspects under which the subject is treated are—the "contamination of primitive music," "the expressive function of music," the "origin of music," "rhythm and melody," "rhythm and harmony," "fusion," "polyphony," "harmony in primitive music," "styles and social function of music," "scales," "equal temperament," "quarter tones," "harmonic intervals in melody," "tonality," "awareness of absolute pitch," and "our attitude towards strange music." An appendix on the phonograph follows.

Mr. J. L. Myres, who, at the beginning of his paper on "The Sigynnæ of Herodotus," makes a warm acknowledgment of his indebtedness to Tylor, appears here as the champion of Herodotus. The paper is planned to deal with seven points mentioned in the passage examined, the first two points referring to the geographical position of the Sigynnæ, the third and fourth to their supposed Median affinities, the fifth the type of pony used by them, the sixth the application of their name to pedlars near Marseilles, and the seventh the application of their name by the Cyprians to a peculiar spear type. The net result is to justify the statements made by Herodotus.\*

Mr. C. H. Read in his suggestive paper, "A Museum of Anthropology," sets forth his ideal of an anthropological museum, and urges the claims of anthropology to a more generous recognition by the Government and the establishment of the long-anticipated anthropological bureau.

In his paper on "Who were the Dorians?" treated first from the point of view of their social system and then from that of their physical characteristics, fashion of wearing the hair and shaving the upper lip, their disposal of the dead, and, finally, their dialect, Professor Ridgeway adduces cogent proof to show that the Dorians differed essentially in race from the Achæaus of Homer, whilst they so closely resemble the Illyrians in all the above-mentioned respects that they may be regarded, like the Thessalians, as an Illyrian tribe.

Messrs. Seligmann and Joyce, in "Prehistoric Objects from British New Guinea," treat of obsidian implements, stone implements, engraved shells and pottery, all of which are truly prehistoric in the sense that in each find objects occur concerning the origin and use of which nothing is known by the inhabitants at the present time.\*

<sup>\*</sup> These papers were read at the last meeting of the British Association, and a full abstract has already appeared in Man (1907, 87, 94).

Physical Anthropology.—Professor Cunningham presents us with a critical recension of the evidence with regard to the evolution of the cerebral portion of the "Australian forehead," and points out the superior advantages of the nasion-inion base-line as compared with the glabella-inion line, reinforced by tables of measurements taken from a large number of native skulls. These are compared with data taken from Scottish crania.

Sociology.—The contributions on "Australian Problems" by Mr. Andrew Lang (whose generous and discriminating tribute to Tylor appears in the forefront of the book), by Mr. Crawley on "Exogamy "and the Mating of Cousins," by Dr. Rivers on "The Origin of the Classificatory System of "Relationships," and by Mr. Thomas on "The Origin of Exogamy," form a group of papers dealing with various vexed questions connected with kinship and marriage.

Religion, Magic, Folklore.—Dr. Farnell's paper on "The Place of the Sonder-Götter in Greek Polytheism" contains a destructive criticism of Dr. Usener's theory with regard to the vague

transitory limited divinities whom he calls Sonder-Götter or Augenblick-Götter.\*

Dr. J. G. Frazer in a most interesting paper on "The Folklore of the Old Testament," deals with a few survivals of ancient Semitic paganism, viz., "The Mark of Cain," "Sacred Oaks and Terebinths," "The Covenant on the Cairn," "Jacob at the Ford of the Jabbok," "The Bundle of Life," the prohibition "not to see the a kid in its mother's milk," "The Keepers of the Threshold," and "The Sin of a Census," for which he finds parallels in modern anthropological lore.

Dr. Haddon, in "The Religion of the Torres Strait Islanders," deals with masked dances, magical and otherwise, wood and stone images, totemism (the absence of which in Murray Island is noted), omen birds, forms of divination, e.g., skull divination for theft among the Murray Islanders, spirits of the dead, hero-worship, relation of morality to religion, instruction in ethics and conduct, cults of Kwoiam, Sigai, Maiau, and Bomai-Malu, and lastly, the idea that some of the hero-tales are nature myths is discussed and disproved.

Mr. E. S. Hartland, in his paper on "The Rite at the Temple of Mylitta," discusses the sacrifice of chastity by every Babylonian woman at that temple. Mr. Hartland explains this rite as a puberty ceremony, and suggests that the exogamic rules of the ancient Semites corresponded to our tables of the prohibited degrees.

Mr. Marett's paper, "Is Taboo a Negative Magic?" contains an attack upon the theory thus

formulated, which in his opinion cannot be sustained.

Sir John Rhýs, in his paper on "The Nine Witches of Gloucester," concludes that the latter may be safely identified as Goidelic sorceresses "who are regarded as enjoying the gift of prophecy and prediction."

Professor Thomson, in "The Secret of the Verge Watch," has demonstrated the fact that the design on the "cocks" (as they are technically called) of these watches, takes its origin from a pattern employed as a charm against the Evil Eye. He deduces from this fact the probability of the existence of some Italian influence or influences affecting the design.

Professor Westermarck fitly concludes the text of the volume with a valuable study of a particular system of cursing employed among the Moors, under which one person stands to another in a certain compulsory relationship or "bond" called  $L\widehat{Ar}$ .

Miss Barbara W. Freire-Marreco's Bibliography is a most painstaking compilation, which adds emphasis to the remarks which here follow.

The subjects comprised in these studies were, with one or two possible exceptions, all treated in Tylor's great pioneer work on *Primitive Culture* more than a generation ago. Since those days they have been developed pari passu with the remarkable advance of all other modern sciences. No fact could be more eloquent of the commanding position taken by Tylor or of his inspiring influence and example, both as a man and a scholar, upon his own and the succeeding generation.

The work is the best proof possible of the determined mood in which anthropology has set herself to enlarge her borders and widen her horizon. In 1871 when the first edition of *Primitive Culture* appeared, the entire *fasciculus* of subjects here treated was dealt with by Tylor in the two epoch-making volumes so familiar to us all. At the end of 1907, in the place of the single science we have a group of subjects, each of which is a science in itself, and in place of one, a number of authorities, each a specialist in his own line.

Two or three reflections suggest themselves here. In the first place there is evidence, afforded by the Festschrift, of the existence among anthropologists of a

<sup>\*</sup> These papers were read at the last meeting of the British Association, and a full abstract has already appeared in MAN (1907, 87, 94).

central party ready to co-operate and work disinterestedly for the common cause, to the exclusion of subsidiary or personal considerations. In the second place there is proof of the marvellously rapid and spontaneous growth of anthropology as a branch of study. In the third place there is the fact that anthropology, which began with the commonly uninspired and uninspiring consideration of isolated facts, has been lifted to an altogether higher plane by the comparative study of the leading principles now employed in the interpretation of the phenomena observed. In a word, anthropology, the most absorbing of all studies yet known to man, has breathed the spirit of life into the Valley of Dry Bones, and her eyes are lit with the glow of her success, and the promises of victories to be. To have inspired this vitalising movement, and to have awakened her to a sense of her great heritage, is the peculiar privilege and merit of Edward Burnett Tylor.

W. W. SKEAT

India. Gurdon.

The Khasis. By Major P. R. T. Gurdon. London: D. Nutt, 1907. Pp. xxvii + 227. 22 × 14 cm. Price 7s. 6d.

This book is part of a series of publications issued under the auspices of the Government of Eastern Bengal and Assam, and is a welcome sign of the interest which the Indian authorities now take in anthropological enquiries. The author, Major Gurdon, is himself a district officer in Assam, and holds the post of Director of Ethnography in that province.

The monograph is a most valuable one and displays an intimate acquaintance with the Khasi race. Its value is enhanced by the introduction in which Sir Charles Lyall, who was formerly Chief Commissioner of Assam and is well acquainted with the ethnological and linguistic questions involved, confirms the conclusions formulated by Major Gurdon.

The illustrations are excellent, especially those in colour, mostly portraits of typical Khasis from drawings by Miss Scott O'Connor and the late Colonel Woodthorpe, and the photographs of the rude stone monuments by the author and others.

The most important points dealt with relate to the isolation of the Khasi race among the surrounding Tibeto-Burman tribes; to the prevalence of matriarchy (including a female priesthood); to the religious beliefs, which are mainly animistic with a tendency to ancestor worship; to the prevalent taboos (genna or sang); and to the erection of monoliths, mainly as memorials of ancestors.

The Khasis occupy the beautiful bill country which lies round Shillong, the capital of Assam, and includes Cherrapunji, celebrated as having perhaps the highest rainfall in the world. As members linguistically of the Mon-Khmer family they are isolated from the Aryan Assamese and the numerous hill-tribes of Tibeto-Burman speech, their nearest neighbours being the Mons of Tennasserim and Pegu and the Khmers of Cambodia. The investigations of Logan, carried further by Kuhn, have, as Sir C. Lyall points out, established a connection between this Mon-Khmer group and the Mundā languages of Chutia Nagpur and the Central Provinces of India, and now the work of Father Schmidt has opened out a long vista of further possibilities. His theories seem to be accepted as sound by the best authorities, and Dr. Grierson considers that Father Schmidt has amply proved his case. In his review of Schmidt's "Die Mon-Khmer Völker, ein Bindeglied zwischen Völkern Zentralasiens und Austronesiens" in the Journal of the Royal Asiatic Society for January 1907 he gives a full account of the Austric theory as he names it (following Schmidt's "Austrisch"), accompanied by a map.

Briefly speaking, Father Schmidt claims to have established the existence of a chain of related languages beginning as far north as Kanāwar in the North-west Himalaya through Central India and Assam, the Nicobars, Burma, and Cambodia to

the Malay Peninsula, and this group he calls the Austro-Asiatic. He further claims to have shown that an essential identity exists between the languages of this group and those which he includes under the title of Austronesian (comprising Indonesian, Melanesian, and Polynesian), and gives this united family the name of Austric. As far as the Austro-Asiatic group is concerned Schmidt also holds that there is a unity of race as well as of language, and considers that a race with characteristics neither Aryan nor Mongolian is clearly established. He does not at present assert that this unity of race extends through his Austronesian group, and even as far as regards the Austro-Asiatic group most anthropologists will probably consider that the materials available are not as yet sufficient to warrant the adoption of a definite opinion. It is here that the value of such a monograph as this of Major Gurdon's on the Khasis becomes apparent. The Khasis form one of the most important links in the chain connecting the Mundā and Himalayan tribes with those of Further India and the Malay Peninsula, and it will probably be considered that Major Gurdon's descriptions and drawings are on the whole confirmatory of Schmidt's theory.

It may be added that the book contains a valuable chapter on folklore, and several legends and nature myths are given in the original Khasi with translations. These are so interesting as to deserve a separate notice, and it may be hoped that Major Gurdon will see his way to publishing a further instalment of the materials he has collected. Altogether this is one of the most complete and satisfactory monographs on an Indian tribe which has appeared for many years, and it is especially important at the present time when its bearing on the Austric theory is considered.

M. LONGWORTH DAMES.

## Africa, East.

Fülleborn.

Das Deutsche Njassa- und Ruwuma-Gebiet, Land und Leute nebst Bemerkungen über die Schire-Länder. Von Dr. Friedrich Fülleborn. Berlin: Dietrich Reimer (Ernst Vohsen), 1906. One Vol. and Atlas. Pp. xx + 636. 118 plates. 28 x 19 and 44 x 31 cm. Price 125 marks.

Dr. Fülleborn went to Africa in 1897 as medical officer to the German Imperial Police and remained there for three years, taking part in the expeditions against the Wangoni (1897) and Wahehe (1898), and later on, as zoologist, in the Heckmann-Wenzel scientific research expedition. The volume before us gives a very readable account of the author's journey from Lindi to Lake Nyasa and from the Lake to Chinde, via Shire and Zambesi, as well as a very full account of the tribes to be found in the southern part of German East Africa. Free use has been made of the material already published in the Physische Anthropologie der Nord-Njassaländer, but undue technicality has been avoided, and the matter included is sufficiently interesting to the general reader, while by no means "popular" in the sense of being superficial or inaccurate. Dr. Fülleborn has supplemented his own observations with an imposing array of literature -English and German (some of the latter less known in this country than it deserves) -of which careful and critical use has been made. The chapter-headings may serve to indicate the scope of the book: "The German Rovuma Territory" (i.e., the north bank of that river)-" Ungoni" (viz., the country between 35° and 36° E. and 10° and 11° S., occupied by the Northern Angoni or Magwangwara)—"Uhehe, Ubena, and Usangu" (forming the plateau to the north-east of Lake Nyasa)-" The Konde Country "-" The Nyasa and the German Lake-Shore "-" The Livingstone Mountains "-" The Region between the Konde Country and Lake Rukwa"-" Native Methods of Hunting and Fishing in German East Africa." The personal narrative already mentioned is confined to the first and last chapters. The authorities cited are indicated in the footnotes by numbers corresponding to a list at the end of each chapter—a plan which . strikes us as particularly convenient. It is impossible to discuss a work of this calibre

in a notice like the present, but a few points which strike us may find room here. The Wamachinga (p. 46) are certainly a branch of the Yao-one of the five whose names were given to Mr. R. S. Hynde (by a Domasi native?): Machinga, Mangoche, Masaninga, Namataka, Makale. Archdeacon Johnson calls the "Amakali" "the Wayao proper." Dr. Fülleborn does not mention the settlement of the Wamachinga along the Upper Shire, under Mponda and other chiefs. P. Adams calls them and the Amalamba the aborigines of the Lindi hinterland. This is the sole reference to the latter tribe which Dr. Fülleborn has come across; but we find their name in "the fords of Amaramba" (marked in the maps as "Amaramba Lake" on the upper Lujenda), by which the Alolo are said to have invaded the Machinga (see Nyasa News, February, 1894, p. 77). The Makua language is said (p. 52) to be "Höchst eigenartig, und weicht stark von den anderen Bantudialekten ab." Surely some notice should have been taken of its remarkable phonetic correspondences with Sechuana, on which so much stress has been laid by Father Torrend. A few families of Wamatengo (p. 128), who accompanied the Angoni return migration southward, are now settled in Nyasaland, west of the Shire.

With regard to the Zulu head-ring (see note, p. 152) I should like to add that the Angoni form (at least that used by Chekusi's Angoni in the Kirk Mountains) is plaited, having the appearance of a basket-work crown, instead of the smooth polished ring, about an inch in diameter, which is worn by the Zulus of the south. Mabrusi, an induna of Chekusi's, whom I saw in 1894, told me that his ring was made of ox sinews (which agrees with Dr. Fülleborn's information) and covered with beeswax. The head-ring of Natal Zulus, I have always understood, is of plaited grass, and the black matter covering it (which takes a dull polish; a bright one, like the shining jet black rings of the Delagoa Bay natives, is considered "bad form") is made from the gum secreted by a certain insect to be found on mimosa trees. A Natal Zulu (in a letter received some years ago) says, it is true: "Zulu head-rings, too, are made of usinga lwenkomo (ox sinews), like those of the Angoni." I do not know whether this indicates a difference of practice, or refers merely to the sinews as used for stitching the grass ring to the hair. Many interesting notes might be made on the Konde folk-tales given in pp. 334-8. One (p. 335), which the author calls "psychologisch recht unverständlich," occurs in a more intelligible form in Duff Macdonald ("The Three Women," ii, 198), and again in Juned (Chants et Contes des Baronga: "La Route du Ciel"). But, indeed, the key to the puzzle is supplied at the end of the paragraph by the sentence "Eine hübsche Variante dieses Märchens erzählt Missionar Nauhaus unter dem Titel 'Frau Holle im Kondelande.'" Besides the splendid atlas of plates and maps supplied with the book there are over 200 woodcuts in the text, mostly of great interest. We may mention in particular the series showing keloid patterns on pp. 77-83.

A. WERNER.

#### America.

Friederici.

Skalpieren und ähnliche Kriegsgebräuche in Amerika. Inaugural Dissertation zur Erlangung der Doktorwürde der Philosophischen Fakultät der Universität Leipzig. Von Georg Friederici. Braunschweig: Friedrich Vieweg und Sohn, 1906. Pp. 172. 23 × 15 cm. Price 5 marks.

The author of this monograph holds the rank of captain in the German army, as well as his doctor's degree from Leipzig, and is already well known for his studies of cavalry methods and of Indian subjects, for which latter he has had the advantage of extended residence and travel in the United States in an official capacity. The present paper on scalping and kindred practices is the most important that has yet appeared on the subject, including in its scope both continents, but with special attention to the United States and Canada.

After some notice of the practice in ancient times he summarizes the earliest references to the custom as observed by the first explorers along the Atlantic coast, the first definite mention being by Cartier on the St. Lawrence in 1535.

Contrary to the general supposition he finds that the practice of scalping, so far from being general in North America at the beginning of the historical period, was confined to an area stretching approximately from the mouth of the St. Lawrence south-west to about the mouth of the Mississippi, and occupied chiefly by tribes of Irroquoian and Muskogian stock. It was absent from New England, from the interior and the plains regions, the Pacific coast and the Columbia, the Canadian North-West and the Arctic territories, and was unknown anywhere south of the United States, excepting in a portion of the Chaco of South America. Outside of the scalping area the ordinary trophy was the head, the trophy cult having its highest development in the tropics.

The rapid spread of the scalping practice over the greater portion of the continent within the historic period he ascribes to the introduction of firearms and to the encouragement given in the shape of scalp bounties by the rival colonial governments, and he quotes scalp prices from King Philip's war in 1675 down to the Piute troubles in Idaho in 1865. Under such stimulus both warriors and bordermen became scalp hunters from the Atlantic to the Pacific. In western Indian custom the coup was always of more importance than the scalp.

Considerable space is devoted to a description of war trophies of human skin, teeth, skulls, hands, &c., particularly in southern Mexico and Yucatan. The accompanying bibliography includes almost every important title in American ethnology, and a valuable map makes the whole argument clear at a glance.

JAMES MOONEY.

#### ANTHROPOLOGICAL NOTES.

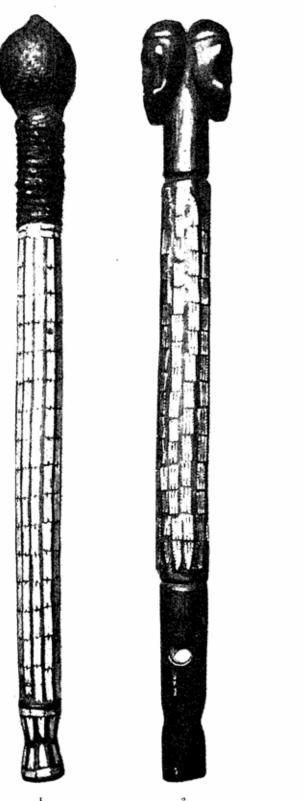
THE King has been pleased, on the recommendation of the Secretary for Scotland, to approve the appointment of a Royal Commission to make an inventory of the ancient and historical monuments and constructions connected with or illustrative of the contemporary culture, civilisation, and conditions of life of the people in Scotland from the earliest times to the year 1707, and to specify those which seem worthy of preservation. The Commission is to consist of the following persons:—The Right Hon. Sir Herbert Maxwell, Bart. (Chairman), the Hon. Lord Guthrie, Professor G. Baldwin Brown, Mr. Thomas H. Bryce, M.D., Mr. Francis C. Buchanan, Mr. W. T. Oldrieve, Mr. Thomas Ross, and Mr. A. O. Curle (Secretary to the Society of Antiquaries), as Secretary.

THE Sixteenth International Congress of Americanists will be held at Vienna from September 9th to September 14th next. The main subjects to be discussed will be the Aboriginal races and the monuments and archæology of America, and the history of its discovery and occupation. A number of invitations have been sent to the Institute for distribution, and persons desiring to be present are requested to communicate with the Secretary, 3, Hanover Square, W.

THE death is announced of Mr. George M. Atkinson on January 21st. He was a Fellow of very long standing, having been elected in 1874, was a constant attendant at the meetings of the Institute, and had been a member of its Council. His loss will be greatly felt.

Dr. W. H. R. RIVERS left in December for the Solomon Islands, where he is proposing to study the sociology of the natives.









24.

2b.

TWO DECORATED MACES FROM THE SOLOMON ISLANDS.

CAMBRIDGE UNIVERSITY MUSEUM OF ARCHÆOLOGY AND ETHNOLOGY.

#### ORIGINAL ARTICLES.

Solomon Islands.

With Plate C.

Hügel.

Decorated Maces from the Solomon Islands.  $von\ H\ddot{u}gel.$ 

By Baron Anatole

Cambridge has been fortunate in acquiring recently some noteworthy additions for its already important series of inlaid objects from the Solomon Islands, for which the University is indebted to Professor Bevan, the generous donor who presented the magnificent pair of shields described and figured in Man, 1906, 21 (Plate C). Among these recent accessions, two exceptionally fine examples of chief's maces deserve special mention:

One (Pl. C, Fig. 1) of beautiful workmanship, has the shaft entirely encrusted with pearl shell, each of its fourteen facets bearing a band of sixteen closely set, oblong, plates with nicked upper and lower edges, which, on the bobbin-shaped handle-end, so that the inlay may follow the contours of the waist, are replaced by plates of an elongate triangular form with nicked bases, set, point to point, along either slope in

two rows of eleven plates each. Small oblong plates, set horizontally, form three marginal bands: one below the neck is composed of a double row, and two single rows form margins to the handle-end, the flat base of which bears a shell roundel with serrated edge. The shaft above the inlay is closely bound with plaited strands of split cane; and the ornamental wickerwork covering of the oval stone-head shows a pattern of four lozenge-shaped panels (Fig. 1).\* Dimensions: total length, 400 mm.; greatest diameter of shaft, 26 mm., of its base, 25 mm.; length and breadth of head, 54 mm. × 43 mm.

The second example (Pl. C, Fig. 2), in which the stone head is missing, or possibly, was never fitted to the shaft, shows the provision made for its secure attachment in two transverse perforations of ) ( section, which pierce the upper end of the shaft on opposite faces, about 1\frac{1}{2} inches apart. The shaft, which is less carefully finished than that of the first example, is richly decorated with shell-plates. These include a large number of distinct forms, viz.: triangular (resembling both barbed and tanged, and cusped arrowheads) pointed-oval, lunate, oblong, and others of more claborate and unusual design—not unlike the letters M



Fig. 1.

and N. These plates are set in ten longitudinal bands (eleven, if one numbering but four plates is included, though this obviously fills a gap left by irregular setting of the inlay (Pl. C, Fig. 2b). All the bands, numbering from fourteen to seventeen plates, begin and end with a triangular plate pointing outwards. Eight of these bands show a single row of plates, and two, starting single from the handle end, change into double rows: one in the last but one row (after the first plate, chiefly composed of lunates, which pattern is not used elsewhere) shows three plates in the penultimate row; and the other becomes double after the sixth plate, and is made up of M's and N's. This pair of wider bands marks the sides of the mace, over which the handle-masks protrude (Pl. C, Figs. 2a and 2b). The cylindrical and faintly facetted

<sup>\*</sup> According to Schmeltz and Krause, the point on the head is produced by attaching a small lump of lime to the crown of the enclosed pebble. (Cutalogue Museum Godeffroy, p. 94.)

shaft tapers towards the handle, which presents an oval section, the decorated portion being marked off top and bottom, by a deep encircling groove. The handle ends in a pair of human masks set back to back, which are identical in character show a peculiarity in a concave ear-like projection on either side of the jaw.

Traces of rosin, here and in the hollows of the eyes, bear evidence that the handle-ends before having been rubbed down by wear, bore decorative inlay. A small groove above the forehead indicates the hair or some kind of head-covering (Fig. 2). Dimensions: total length, 401 mm.; greatest diameter of shaft, 31 mm.; total length of handle, 85 mm.; breadth across heads, 50 mm.

These maces were purchased without data in 1907, at a London sale; but to judge by their distinctive ornamentation, it seems probable that they came from different islands. If we may judge by the very small number to be found in collections, this form of mace can never have been common, for their beauty is sure to have attracted attention. Possibly these few examples, of which the exact origin is only



FIG. 2.

known in one instance, may prove to be the sole descendants of an earlier form of stone-headed weapon—survivals which before collectors reached the islands had themselves fallen into desnetude. However this may be, it does not seem probable that such elaborately decorated weapons had ever been numerous, or that any but persons of rank would be allowed to carry them. I can only trace the following six other examples:—

- London, British Museum: one (headless), not unlike Cambridge specimen No. 1. No particulars. Edge-Partington's Album, S. I, Pl. 206, Fig. 8.
- 2, 3. Dresden, Museum Godeffroy: two, one with facetted, inlaid handle-end; and one plain-shafted, carved with a double human-figure terminal. From Malayta. Schmeltz and Krause, Cat. Mus. Godeffroy, 1881, Pl. 20, Figs. 6 and 7.
- 4-6. Sydney: three, two with widely set shell inlay (one with crescent-shaped handle-end). No particulars. University (Maclean) Museum; and one of distinct type, with plain shaft ending in a human head inlaid with white shell. No particulars. Australian Museum. Edge-Partington's Album, S. III, Pl. 34, Figs. 1, 2, and 3.

  ANATOLE VON HÜGEL.

Mexico: Archæology.

Breton.

## Archæology in Mexico. By A. Breton.

Within the last few years some important discoveries have been made in Mexican archæology, and a brief note on them may interest those who look forward to the time when the ancient history of the American continent will take its rightful place in the world of science. At present, the small band of workers in this field can do little, although every little helps. Recruits are badly wanted, and, seeing the fascination of the subject, they should be forthcoming.

In the city of Mexico, during the excavations necessary for the great drainage system, vast quantities of objects were found several metres below the surface of the street of Escalerillas, near the site of one of the principal ancient temples, and of the modern cathedral. There were beads and figurines of jadeite and other polished

stones, painted pottery (including beautiful censers covered with symbolic designs), chert daggers and lance-heads, ear, nose, and breast ornaments of thin gold plates, and various archaic stone heads and statues. A large altar with reliefs of skulls and crossbones was also found and is now in the museum. Leopoldo Batres, the Government Inspector of Ruins, superintended these excavations and published an illustrated report.

In 1902 Señor Batres excavated part of the great temple-fortress on Monte Alban, near Oaxaca, and found many sculptured stones, menhirs, and some with hieroglyphs of a type distinct from those of Central America. A report of this was published by the Mexican Government, which has become very energetic as regards the country's antiquities. It is now spending large sums on excavations at Teotihuacán.

Teotihuacán is the best known of ancient Mexican sites, being only an hour by train from the capital. The principal features are the two great pyramids, called of the Sun and Moon, the former facing the centre of the "Street of the Dead," the latter at the far end, and the Cindadela which is apparently a temple-fortress some-

what similar to that on Monte Alban. The pyramid of the sun is about 66 metres high, 232 metres wide at the base on the north and south sides, and 224 metres wide from east The "north" side faces to west. several degrees north-east. Trees and bushes had grown over the great mound in the course of centuries, for the outer layer of masonry was stripped off when the many villages and towns in the neighbourhood were built by the Spaniards. Not only has the vegetation now been cleared away, but Señor Batres "has removed states that he " 7 metres in thickness from the " north and south sides and 4.60 " metres from the east and west " sides." The effect of this has been to render the angles of the three terraces which form the pyramid much more obtuse than formerly (Fig. 1).

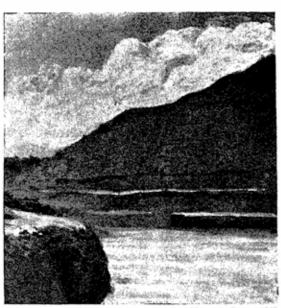


Photo. A. Breton, 1965.

FIG. 1.—HOUSE OF THE PRIESTS AND S.W. CORNER OF THE PYRAMID OF THE SUN, TEOTIAUACÁN.

Señor Batres says that the pyramid was constructed of adobes, covered by three thick coats, each consisting alternately of clay and stone. The coat which will now remain visible, has been repaired and cemented. It is of partially shaped stones set more or less in rows, and formed into sections by perpendicular straight rows. It was obviously never intended to be a surface coat, and here and there are outstanding buttresses which helped to sustain the great outer coat of masonry. A shaft is to be sunk from the summit down the middle of the interior. On the south side a long court separates the pyramid from a wide raised platform. This has, at its south-west corner, remains of a chambered dwelling, probably of the priests. On the west side, portions of minor stairways and three small temples have been found, but most of the stones are gone which belonged to the main stairway. Great quantities of labrets and ear ornaments have been found, especially on the top

of the pyramid, also some sculptured stones and a remarkable male torso. temples which border the Street of the Dead, something after the fashion of those in the Roman Forum, are now being uncovered. One in particular is extraordinary for the way in which it has been altered and added to, as the additions conceal painted stucco walls, and one wall has been painted three times with different frescoes, of which parts remain, one over the other.

Herr Teobert Maler has made several expeditions for the Peabody Museum at Harvard into the difficult and little-known country on the borders of Chiapas and Guatemala, and the two volumes of his report on the ruins have been published by that museum. The photographs give an excellent idea of the very high stage of art which had been reached in that district, shown in the magnificent reliefs on the stele.

Photo. Mrs. James.

FIG. 2 .- PART OF THE RELIEF, ACANCEH. to a few inches from the wall, and then earth and lime dust thrown in to make all solid. On removing this, a length of 40 feet of wall appeared, with a band of reliefs in panels, surmounted by a cornice with a symbolic design and another border below. Each of the twenty-one panels contains a symbolic bird or a quaint hybrid beast, done with the greatest skill in very high relief, and painted in colours on a red ground (Fig. 2). The ruffled breasts of the birds are curiously given by means of quantities [ 16 ]

of chipped flakes of crystalline limestone which stand out from the cement (Fig. 3).\* This wall is merely the outer wall of some funeral chambers which appear to have formed the interior of what was the highest terrace of the pyramid. There are other funeral chambers lower down on the half-destroyed side.

Another mound at Acancel was also being destroyed when they came on a funeral chamber at the top. It contained bones of a man and woman and jars and

plates of painted pottery. Below this appeared the original core of the mound, which had been covered with about 20 feet in thickness of rough stones. This core was covered with cement, a terraced pyramid, with gigantic stucco faces in relief. Two of these are visible on the recently destroyed side, but the stucco soon falls with exposure to air and rain. They are in the same style as the colossal head Izamal. It is quite possible that some of the fifty-nine mounds at Ake contain something similar. Unfortunately, whilst the Government prevents any exploration by foreigners, it cannot prevent destruction by owners of property, nor by time and That the ancient folk built well is shown by the fact that after at least 400 years of desertion so much remains in good condition at Labna, Uxmal, and



FIG. 3,-CORNER OF RELIEF : BIRD'S WING WITH EYE IN CENTRE AND CLAW BELOW.

The casual tourist may consider them comparatively modern, but no one ADELA BRETON. will do so who has really studied them.

Australia. Van Gennep.

## Questions Australiennes (II). By A. van Gennep.

Par les soins de M. von Leonhardi vient de paraître à Francfort† un volume sur les Australiens Centraux qui confirme plusieurs théories que j'ai exposées ailleurs. Ce volume ne contient encore qu'une faible partie de matériaux recueillis par M. Strehlow, l'un des missionaires de la station de Hermanusburg, et qui connaît à fond

<sup>\*</sup> The writer removed the untouched stones and earth from this corner, and found that the nearer part seen in the photograph was a mass of breccia, which apparently contained human dust. Although very dry, the breccia was hard to break up, and the peculiar dust was mixed with stones, with no trace of burial or cremation.

<sup>†</sup> G. Strehlow, Die Arandu- und Loritja-Stämme in Zentral-Australien. I. Teil. J. Baer et Cie., 1907. 15 marks.

<sup>1</sup> Mythes et Légendes d'Australie, 1906; Questions Australiennes, MAN, 1907, 16.

les dialects arunta, luritja, et dieri.\* Ces matériaux sont publiés par M. von Leonhardi, auquel on doit d'avoir poussé M. Strehlow à s'enquérir avec une minutie de plus en plus grande de la vie mentale et sociale des Australiens. M. von Leonhardi réserve pour un volume ultérieur les renseignements sur les churinga (ici écrit tjurunga); mais il indique, heureusement, dans la Préface du présent fascicule quelques-uns des résultats généraux dont on est sûr actuellement. Il y a lieu, en outre, de noter, que les bruits qui circulaient sur la mauvaise qualité des matériaux fournis par Spencer et Gillen n'ont aucune raison d'être : ils provenaient d'une interprétation hâtive de documents dus aussi à M. Strehlow et publié par N. W. Thomas, Folk-Lore, 1905, et par M. von Leonhardi, Globus, 1907, XCI, p. 285 sqq., et XCII, p. 123. La lecture des textes et des notes du fascicule I, comme celle de la Préface, prouve qu'on avait Ou plutôt, les premiers renseignements fournis par M. Strehlow étaient inexacts dans le détail : plus il a approfondi ses enquêtes, mieux s'est montrée la concordance entre la réalité et la majorité des renseignements de Spencer et Gillen. Pourtant certaines de leurs affirmations tombent: Alcheringa par exemple ne signifie pas Epoque du Rêve ou Temps du Rêve, mais Epoque où les altjirangamitjina (ancêtres totémiques) erraient par le monde; les spéculations de quelques théoriciens sur la "philosophie arunta" perdent donc tout support. De même le mot altjira n'est par un nom propre, mais il désigne une classe d'êtres doués de puissance et en général des qualités que possèdent les "Ancêtres du temps de l'Alcheringa" de Spencer et Gillen.

Voici maintenant celles de mes théories qui se trouvent confirmées.

- 1°. Les Ancêtres Mythiques descendent sous terre, mais n'y meurent pas: ils en sortent la nuit, pour se réincorporer dans leurs corps antérieurs, les churinga (tjurunga); comme je l'objectais à M. Lang (Man, 1907, 16, p. 23) il n'y a pas, dans les mythes et légendes arunta, corrélation entre descendre sous terre et mourir. De l'analyse des textes de M. Strehlow il ressort en outre, que c'est bien la puissance des Ancêtres qui demeure sous terre, ou dans les rochers, etc.
- 2°. J'avais prétendu que les Australiens Centraux ont élaboré une sorte de biologie et de physiologie : "parmi les processus d'ordre biologique, celui de la reproduction a "dû les intéresser et leur suggérer des théories pré-scientifiques." Dans sa Préface, M. von Leonhardi confirme cette opinion : les enfants se font, suivant les Arunta et les Luritja, de plusieurs manières :
  - 1°. "Un germe infantile (ratapa), qui réside dans les Ancêtres Mythiques descendus sous terre, pénètre dans le corps d'une femme qui passe : les enfants aiusi procréés ont le visage étroit."
  - 2°. "Un Ancêtre sort de terre et jette un petit rhombe sur une femme ; le rhombe pénètre dans la femme et s'y transforme en enfant : ces enfants ont le visage large."
  - 3°. "Un Ancêtre pénètre lui-même dans une femme, puis renaît sous forme d'enfant; il ne peut renaître ainsi qu'une seule fois : ces enfants ont les cheveux clairs."

Les Luritja, voisins des Arunta, ont les même croyances, d'après les articles cités du Globus.

Ainsi se trouve établie une fois de plus l'existence, chez les Australiens Centraux, de la croyance à la lucina sine concubitu. Elle l'a été aussi pour les Larrekiya de la côte Nord par M. Basedow,† pour les Euahlayi de la Nouvelle Galles du Sud

<sup>\*</sup> On remarquera des différences, en général peu considérables, dans l'orthographe des mots australiens chez Spencer et Gillen et chez Strehlow; beaucoup plus importants sont les éclaircissements et les discussions philologiques et sémantiques qui assurent l'intelligence des mythes et légendes dont est formé le présent volume.

<sup>†</sup> Trans. Royal Soc., South Australia, 1906, p. 4, d'après M. von Leonhardi.

par M°. K. L. Parker,\* pour certains Australiens de l'Ouest par Mrs. Bates,† comme elle l'avait été pour les tribus de Queensland par W. E. Roth. Il y aurait donc mauvaise grâce à prétendre qu'il s'agit là d'opinions isolées ou anormales. Si ces mêmes opinions n'ont pas été relevées par M. Howitt pour le tribus du Sud et Sud-Est, cela peut teuir, soit à ce que M. Howitt n'a pas fait d'enquêtes sur ce point, soit à ce que ces tribus, manifestement eu voie de transformation profonde (M. Howitt m'a affirmé à nouveau ceci récemment), ont abandonné leurs propres théories pour accepter celle des Blanes, tout aussi absurde, d'après laquelle c'est le père seul qui a le pouvoir de procréation.

3°. J'avais, dans l'article cité, indiqué que c'est la théorie sur la génération, mais non la théorie réincarnationiste, qui constitue selon moi le problème intéressant; et j'ajoutais : "la théorie réincarnationiste n'est que l'une des explications demi-civilisées " du procès physiologique et biologique." C'était, par contre-coup, mettre au second rang des opinions sur lesquelles M. Frazer a fondé sa théorie nouvelle de l'origine du totémisme.‡ Or dans Globus, XCI, p. 289, se trouve un passage de M. Strehlow qui donne raison à M. Frazer, passage dont M. Lang a mis en relief toute la portée théorique. § Par malheur M. Strehlow s'était trompé, ou plutôt mal exprimé. M. von Leonhardi lui ayant écrit à ce sujet, M. Strehlow lui répondit en modifiant dans un sens tout autre le renseignement : "Quand une femme, au cours de ses pérégrinations, " aperçoit un kangourou, lequel disparaît ensuite subitement, et qu'au même moment " elle ressent les premiers symptômes de la grossesse, c'est qu'un ratapa-kangouron " a pénétré en elle, mais non pas ce kangourou lui-même, lequel était en réalitié un " Ancêtre-kangourou sous forme animale. De même, si une femme trouve des fruits de " lalitja et qu'après en avoir beaucoup mangé, elle se sente mal à l'aise, c'est qu'un " fruit de lalitja a pénétré en elle par la hanche-mais non pas par la bouche. " Ces deux cas rentrent donc dans la première des catégories citées, c'est-à-dire, qu'un " ratapa pénètre dans la femme qui passe à côté d'un lieu totémique" (oknanikilla de Spencer et Gillen). Autrement dit, il n'y a pas réincarnation proprement dite de l'ancêtre totémique, mais simple transfert de la force vitale de l'ancêtre. Dans les deux premières catégories en effet, la force vitale de l'ancêtre a pour véhicule soit le germe (ratapa), soit le rhombe ; et la réincarnation n'est que l'une d'entre les formes admises du processus de la génération.

Bien mieux, elle n'est même pas admise généralement comme telle. Voici ce qu'écrit M. von Leonhardi: "Quelques uns affirmerent, et les vieillards finirent par "admettre cette opinion, que dans de rares cas un altjirangamitjana (Ancêtre mythique totémique) pénètre lui-même dans la femme"; je souligne les restrictions. On a l'impression que c'est sur les instances de M. Strehlow, poussé à faire cette enquête par M. von Leonhardi, que les Arunta reconnurent la possibilité de la procréation par le procédé réincarnationiste. On peut se demander s'il n'y a pas un suggestion

de l'enquêteur sur les enquêtés.

Quand bien même cette croyance serait vraiment courante et indigène, elle n'en resterait pas moins comme l'une seulement des explications d'ordre préscientifique de la génération, ce qui interdit de baser sur elle une théorie générale comme celle de M. Frazer.

4°. De même qu'ils possèdent une biologie rudimentaire, les Australiens ont élaboré une serte d'anthropologie. C'est du moins ce qui semble ressortir: 1°. de la légende des enfants à la peau claire et des enfants à la peau sombre ; 2°. de la classification

<sup>\*</sup> K. Langloh Parker, The Euahlayi Tribe.

<sup>†</sup> In A. Lang, Quastiones Totemica, MAN, 1906, 112.

<sup>†</sup> Fortnightly Review, September, 1905.

<sup>§</sup> Lesays presented to E. B. Tylor, pp. 217-218.
|| Cf. Mythes et Légendes d'Australie, pp. 21-24.

par "rangs" et par "ombres"; 3°. Les trois théories sur les processes de la génération ont comme objet secondaire de fournir l'explication des variations du type: visages étroits, visages larges, cheveux clairs. Ce fait est intéressant et l'on espère que M. Strehlow en recherchera d'autres du même ordre, afin qu'on sache à quoi s'en tenir sur les rudiments d'anthropologie des Australiens.

5°. Influencés par E. B. Tylor, Spencer et Gillen ont mis à la base de la "philosophie" arunta l'animisme ; influencés par J. G. Frazer, ils ont fait du churinga une "boîte à âme" (soul-box) : l'un et l'autre points de vue m'ont paru inexacts ;† j'attendrai pour reprendre la critique du premier la publication du fascicule II de M. Strehlow. Quant à l'exactitude du second, elle est définitivement rejetée par M. von Leonhardi, dès maintenant: "Les Aranda comme les Luritja nient absolument " que les tjurunga soient le siège d'une âme ou de la vie de l'homme intéressé. Sur " ce point les vieillards et les magiciens se sont à plusieurs reprises exprimés de la " manière la plus catégorique. Des appellations comme Seclenholz, soul-box, et autres " semblables ne conviennent donc pas aux tjurunga des Aranda et des Luritja." Il faut savoir que ce mot de Seelenholz, d'abord proposé je crois par W. Foy (Archiv für Religionswissenschaft, T. VIII), a eu dans le monde des ethnographes allemands une fortune rapide, au point qu'actuellement on parle couramment du Seelenholz des Australiens. Or, non seulement les churinga ne sont pas tous en bois-et Spencer et Gillen affirment que les plus recherchés et les plus puissants sont ceux de pierre -mais, comme je crois l'avoir montré en détail, les churinga sont avant tout des réceptacles de puissance magico-religieuse, qui s'acquiert, qui se transmet et qui s'annule. M. Foy m'a écrit en Avril dernier, à propos des churinga: "C'est bien à " un Seelenholz qu'on a affaire essentiellement, ainsi qu'il ressort constamment des " relations sur les Australiens Centraux"; mais ni Spencer et Gillen, ni maintenant Strehlow et von Leonhardi ne pourront lui servir à démontrer l'exactitude de cette opinion, laquelle d'ailleurs contredirait tout ce qu'on sait actuellement sur les diverses formes du mana chez les demi-civilisés.

Le plus que je puisse admettre, c'est que la notion d'âme est une dissociation de celle, plus complexe et plus confuse, de mana: du mana auraient donc été détachées chez les Australiens des notions plus précises: churinga, arungquiltha, puissance du magicien, puissance du héros civilisateur (Bayamie, etc.), puissance du dieu (contamination chrétienne), force vitale, âme, et peut-être d'autres encore, qu'on déterminera au fur et à mesure des progrès de l'ethnographie australienne. Ce processus de dissociation est universel, et d'en comprendre le mécanisme fournit la véritable clef de toute l'évolution religieuse: de ce point de vue par exemple, rien d'aisé comme l'intelligence du "fétichisme" des Nègres du Loango, tel que le décrivent dans toute sa complexité R. E. Dennett (At the Back of the Black Man's Mind) et Pechuël-Loesche (Volkskunde von Loango). Il semble pourtant, à voir répéter sans cesse des banalités sur l'animisme que ce point de vue soit difficile à assimiler.

Il est d'un heureux augure que MM. von Leonhardi et Strehlow‡ aient entrepris l'étude approfondie des Australiens Centraux : il faudrait maintenant s'occuper aussi des Australiens du nord (des Gnanji par exemple) et des Australiens de l'ouest ; une

<sup>\*</sup> Cf. N. W. Thomas, Kinship Organisations and Group Marriage in Australia, Cambridge, 1907, pp. 50-51, avec la bibliographie; R. H. Mathews, Sociology of some Australian Tribes, 1905, pp. 116, 117, 188-9; Notes on some Native Tribes of Australia, 1906, pp. 97, 99; etc.

<sup>†</sup> La "philosophie" arunta est à base dynamiste (cf. Mythes et Légendes d'Australie, Chap. VIII : l'idée de puissance magico-religieuse; sur la boite-à-âme, cf. p. lxxxix).

<sup>†</sup> Et aussi M. Wettengel, qui a fourni à M. Planert des faits linguistiques et des légendes du plus haut intérêt; cf. W. Planert, Australische Forschungen, I. Arunta Grammatik, Zeitschrift für Ethnologie, 1907.

expédition comprenant non seulement des ethnographes, mais aussi un linguiste au courant des méthodes de la phonétique expérimentale rapporterait certainement la solution de maints problèmes d'un grand intérêt théorique aujourd'hui en suspens.

A. VAN GENNEP.

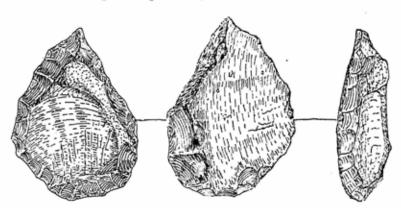
### England: Archæology.

Dutt.

New Palæolithic Site in the Waveney Valley. By W. A. Dutt.

The parish of Hoxne, in Suffolk, is classic ground with prehistorians, owing to the discovery of palaeolithic implements there as long ago as 1797. In his Ancient Stone Implements of Great Britain\* Sir John Evans remarks that, "Though "terraces of gravel are found at various places along the course of the Waveney, and apparently of the same age as those of the Little Ouse Valley, yet up to the present time (1897) no discoveries of implements in them have been recorded, although it seems improbable that it is at Hoxne alone that implements exist." Ten years have elapsed since the veteran archæologist, in preparing the second edition of his book for the press, left the above sentence standing as it was in the first edition; and it was not until November, 1907—just 110 years after Mr. John Frere's famous discovery of the Hoxne palæoliths—that a palæolithic implement was found in the Waveney Valley elsewhere than in the classic locality at Hoxne. I then had the good fortune to find in a gravel pit on the common at Bungay, a town almost encircled by the River Waveney, a small and well-worked pointed palæolith, made of an outer flake of a flint

pebble and having its flaking and secondary chipping confined to one side of the flake. The pit has been in existence a good many years —I myself was in it quite thirty years ago-and I am told that bones of



mammoth have been found in it. At the present time only a corner of it, closely adjoining the marshy part of the common, appears to be worked, and it was there I found the implement in gravel, about four feet from the surface of the ground.

I believe there can be no doubt that the gravel is a river gravel, which was deposited on the inner side of a great bend in the Waveney when it was flowing at a higher level than it does to-day. Bungay Common is chiefly a bed of gravel, probably deposited under the same conditions, and at a time when some higher ground on the outside of the bend in the river was being washed away, until a steep bank quite a hundred feet high in places was left, known to-day as the Bath Hills. On the inner side of the bend the land lies comparatively low, the gravel at the spot where the implement was found reaching the surface of the ground only about ten feet above the present water-level.

Sir John Evans is not inclined to accept the implement as a palæolith, because, in his opinion, "its workmanship is not in accordance with that of the implements of that age"; but Mr. A. S. Kennard, F.G.S., confirms my opinion that it is a late palæolith, and Mr. W. G. Clarke, who has made a special study of the flint implements

of Norfolk and Suffolk, agrees with him. I have handled several thousands of East Anglian neoliths and have never seen anything like it; in addition to this, its edges are much battered and its facet ridges are considerably water worn. None of the rough neoliths, so plentiful on the higher grounds of the Bungay neighbourhood, show any such marks of antiquity, while the later neoliths, occurring on certain sandy spots on Bungay Common, are very delicately-worked arrowheads, knives, and scrapers associated with pygmy flints and polished axes.

W. A. DUTT.

## Anthropology: Academic.

Haddon.

The Regulations for obtaining a Diploma of Anthropology in the University of Cambridge. By A. C. Haddon, Sc.D., F.R.S.

In May, 1904, the Senate of the University of Cambridge established a Board of Anthropological Studies with the powers of a degree committee, like those of other special boards. The studies under the direction of the Board comprise prehistoric and historic anthropology, ethnology (including sociology and comparative religion), physical anthropology, and pyschological anthropology. As then constituted, the Board only had power to approve a suitable candidate for the degree of doctor in science.

Last January the Senate passed a grace establishing a diploma in anthropology. The following are the conditions upon which the diploma can be obtained:—

It is provided that any member of the University who has taken, or is qualified to take, a degree of the University, and has received instruction in anthropology in Cambridge under the direction of the Board of Anthropological Studies during three terms, which need not be consecutive, and has presented a dissertation, which dissertation has been approved by the Board, shall, on the payment of such fees as the Senate may from time to time determine, be entitled to a diploma testifying to his competent knowledge of anthropology.

That any member of the University who has graduated before the date of the establishment of the diploma, has received instruction in anthropology in Cambridge under a university professor, reader, or lecturer for three terms, which need not have been consecutive, and has presented a dissertation, which dissertation has been approved by the Board, shall, on the payment of such fees as the Senate may from time to time determine, be entitled to a diploma testifying to his competent knowledge of anthropology.

That an advanced student who has resided for three terms and has received instruction in anthropology in Cambridge under the direction of the Board during three terms, which need not be consecutive, and has presented a dissertation, which dissertation has been approved by the Board, shall, on the payment of such fees as the Senate may from time to time determine, be entitled to a diploma testifying to his competent knowledge of anthropology, provided that such dissertation shall not have been presented for a certificate of research.

That the dissertation shall be sent to the Chairman of the Board, and that the Board shall have power to appoint one or more referees to examine the dissertations, and if necessary to examine the candidates or ally or otherwise upon the subject thereof, and to report thereon to the Board.

That the Board shall have power to take into consideration together with the dissertation any memoir or work published by the candidate which he may desire to submit to them.

That each candidate before receiving his diploma shall deposit in the University library a copy of his dissertation in a form approved by the Board.

A. C. HADDON.

Sweden.

Duckworth.

Note on Mr. Klintberg's Studies upon the Folklore and Dialects of Gothland. By W. L. H. Duckworth, M.D., Sc.D.

The claims of the Swedish island of Gothland to a position of high importance in the history and archeology of Western Europe have long been recognised by all who have studied the evolution of culture in the Western world. The Gothlandic "finds" constitute perhaps the greatest treasures of the noble National Museum in Stockholm. But the prehistoric period may be elucidated by the study of the conditions of life obtaining to-day in districts little affected by innovations of the twentieth century, and the object of this note is to provide some record (in an English publication) of the life-work of an enthusiastic and patriotic Gothlander.

On a visit to Gothland in September 1906, I had the privilege of making the acquaintance of Mr. Michael Klintberg. We foregathered on the breakwater at Visby, the chief town of Gothland. Dredging operations were proceeding in the harbour, and Mr. Klintberg was kind enough to enlighten me on the subject of the local geological strata, samples of which were then being brought up by the dredger and deposited on the pier.

Subsequently Mr. Klintberg invited me to see his collection of fossils, and incidentally I learned about an important work which all those who are interested in folklore and archæology must hope to see completed by its author.

Mr. Klintberg some years ago conceived the idea of writing a dictionary of the local dialects of Gothland; the scheme was a most ambitious one, for the dictionary was to be illustrated, so far as possible, by photographs or drawings explicative of the significance and employment of the more archaic words or forms of words. For instance, the word used for felling trees would be elucidated by the varieties of axestroke employed, for the native Gothlanders distinguish the "two-hew" from the "one-hew" cut, according as there are two men, or one alone, at work. And, again, there is the "woman's hew" cut, applicable to small branches. All this is explained; photographs shew the woodcutters at work, and, lastly, a model log gives the exact results of the several kinds of cut or "hew." And so on for other terms and their employment.

Mr. Klintberg is headmaster of the Government school for boys at Visby, and his first studies were philological. Incidentally, however, he has brought together with endless patience and perseverance an invaluable collection of documents relating to the folklore of Gothland.

The manuscript is contained in some 25,000 neatly written sheets carefully scheduled and pigeon-holed, but Mr. Klintberg is not very sanguine about the possibilities of publication. That such research is in progress must, however, be a subject of interest for fellows of the Royal Anthropological Institute. As I have already said, some record of this work is desirable, and personally I am glad to have an opportunity of expressing my admiration for the indefatigable zeal with which Mr. Klintberg has prosecuted his self-imposed task. At my request, Mr. Klintberg supplied me with some notes on his photographs and drawings, and a list, which is appended in his own words. Lack of space precludes me from enlarging further upon the other work which Mr. Klintberg has carried out. I have already mentioned his palæontological collection and can only add here that he has established in Visby a collection of local archæology and ethnology whereby much evidence, which otherwise would have perished, has been rescued from oblivion and preserved for future generations of savants.

W. L. H. DUCKWORTH.

Appendix from Mr. Michael Klintberg, Visby, Gothland:—"List of my chief "photographs—Churches, buildings (farmers' mansions and stables with barns), the

" whole process of making a roof with thatching, lunching workpeople (when thatching), " whetting scythes, mowing and making hay, hay feasts (many different), conveying hay " into the barn; cornfield, cutting, binding, and piling rye, old and new methods of " loading it on the waggons (many), conveying it home, threshing machine, winnowing " machine; fishing place with booths and enclosure, fishermen, nets, and other fishing " tackle, going on board, returning from the sea, taking the fish from the nets, mending " and making nets; cutting trees in the wood, piles of wood, taking up stubs, cleaning " and cutting them for tar-distillation, piling the wood on the tar bottom (several " photographs according as the work proceeds); different sorts of fence and gates, " fulling-mill and hand-fulling, plays and sport. I think that the photographs amount " to a number of about 200 and the pencil drawings to some thousands, repre-" senting tools and implements of many kinds, as illustrations to the dictionary." And with characteristic modesty Mr. Klintberg wrote therewith: "Although I scarcely " believe that my photographs are worth mentioning, I send you a dry list of the " chief ones. As I am still only at the beginning it is evident that this collection " is far from being complete and therefore, of course, still little important."

## REVIEWS.

Religion.

Frazer.

Adonis Attis Osiris: Studies in the History of Oriental Religion. Second edition, revised and enlarged. (Being Part IV of The Golden Bough: a Study in Magic and Religion. Third edition.) London: Macmillan, 1907. Pp. xix + 452. 23 × 14 cm. Price 10s.

In the case of so important a work as this it may prove of use to students to provide a list, as complete as I have been able to make it, of the differences presented by the second edition as compared with the first:—

p. 4, n. inserted; p. 10, title of chapter changed; p. 11, "The first . . . 739 B.C." and nn. 7, 8 inserted; p. 12, l. 7, "perhaps" inserted, n. 3 changed; pp. 14-22, "Perhaps the sacred men . . . official sponge" inserted; p. 31, "Conical stones . . . Sinai" inserted; p. 32, "Even the name . . . Aphroditessa" inserted; pp. 41-2, "A parallel . . . duties" and n. 3 inserted; pp. 44-8, "This interpretation . . . worshippers" and nn. inserted"; pp. 50-83, whole chapter and nn. inserted; p. 89, n. 1, "Possibly . . . 138" inserted; p. 99, n. 2, "However . . . class" inserted; p. 136, "A similar . . . pain" inserted; pp. 143-6, "Since there are . . . Jewish kings" inserted\*; p. 167, "in Africa . . . soon die" and n. 2 inserted; p. 191, "And year . . . spring" inserted; p. 194, n. 1, "Gardens . . . commentators" of first edition, p. 137, omitted; p. 201, "At this time . . . Pandharpur" and nn. 2, 3 inserted; p. 222, "At the vernal equinox" of first edition, p. 166, omitted; p. 224, "Some confirmation . . . Attis" and n. 2 inserted; p. 243, l. 17, verbal change; pp. 244-6, "in Greece . . . Scandinavian parallels" inserted\*; p. 246, l. 26, verbal change; p. 287, "and was . . . year" and n. 2 inserted\*; p. 292, n. 2, "With the sleep . . . 159" inserted; p. 295, n. 2, "Formicus . . . semina" inserted; p. 298, "So in the East . . . barn" inserted; p. 300, "when the gilt . . . temple" inserted; p. 303, l. 24, verbal change; pp. 305-6, "The Hkamies . . . home "inserted; pp. 307-8, "In Annam . . . substance" and nn. 1, 2 inserted; p. 309, "The Barea . . . living" inserted; p. 310, 1. 26, verbal change; pp. 333-4, "the Thracian" before Orpheus and Lycurgus, and "In some Thracian . . . river," inserted; pp. 335-6, "In this connection . . . Attis" inserted; p. 337, "In antiquity . . . magic with them" and nn. 1-7 inserted; p. 369, n. 2, "W. W. Skeat . . . 337" inserted; p. 381, "There are . . . cenotaph" and n. 4 inserted; p. 383, title of chapter changed and section heading inserted; pp. 384-95, "At all events . . . male deity" and in. substituted for first edition, p. 320, "That such . . . at bay"; p. 321, "As Miss R. E. White . . . point out" omitted; p. 398, "But the old . . . Alexandria" inserted; pp. 401-6, App. I and nn. inserted\*; pp. 407-23, App. II. and nn. inserted\*; pp. 426-7, "This explanation . . . cattle" and n. inserted; pp. 428-38, App. IV and nn. inserted.

It will be noticed that the omissions, substitutions, and verbal alterations are altogether few and unimportant. The improvements consist almost wholly in shorter or longer insertions of fresh matter; those that appear to me most novel or otherwise valuable being marked in the list by an asterisk. The latter passages consist mainly either in further researches in the anthropology of the Old Testament, or in replies to

the various criticisms and counter-hypotheses promulgated by Dr. L. R. Farnell. All alike bear more or less directly on one and the same question, namely, the place of woman in religion.

At Jerusalem, almost down to the end of the Jewish kingdom, there would seem to have existed both sacred women (kedeshoth) and sacred men (kedeshim) apparently corresponding to them. What their precise functions were, however, and how, if at all, these were connected with fertility-rites of the type made famous by Dr. Frazer's speculations concerning divine queens and kings, remains largely a matter of analogical inference, if only because of the expurgated condition in which the Hebrew Scriptures have reached us. (Very interesting and profound observations, it may be mentioned by the way, on the manner in which the book of early times is liable, to expurgation, the case of the Hebrew Scriptures being especially considered, are to be met in Dr. Gilbert Murray's recent work, The Rise of the Greek Epic, Oxford, 1907, pp. 101-35.) In trying to get at the meaning of the various practices, and more especially those of a sexual character, devolving on sacred persons in the East-Mediterranean region generally, we must be careful to distinguish their proximate significance, namely, the sense they had for the age to which our evidence immediately refers them, and their original significance, namely, the far-off savage notions out of which they presumably evolved. It is only fair to say that Dr. Frazer's argument for a connection with fertility-rites relates chiefly to the question of proximate significance, without prejudice to the possibility of an origin, or even of several distinct origins, having nothing whatever to do with the magico-religious pursuit of fertility in the matter of crops, of offspring, or of both together. Now sexual relations entered on by sacred persons with the object of sympathetically augmenting fertility might conceivably take place either between sacred men and sacred women; between sacred men and profane women; or between sacred women and profane men. Examples of the first class would best suit Dr. Frazer's general scheme of thought. Then we should have represented in ritual the mystic marriage of male and female powers, the divine king and the divine queen, Adonis and Astarte. As a matter of fact, however, nothing, in the new evidence at least, points at all definitely in this direction. (2) Under the second head, Dr. Frazer hints, might be brought the case of the sons of Eli and the women who frequented the tabernacle. The rest of his evidence proves little more than that, as is well known, women are wont to resort to holy places as a cure for barrenness, the physical intervention of the holy men being deduced from the vaguest of ill-natured gossip about modern types of holy men. (3) Under the third category we get unambiguous cases of prostitutes maintained in connection with a temple or shrine, and Dr. Frazer produces some crucial evidence from India and West Africa to show that these women tend to be regarded as wives of the god. That they are supposed to bring about some mystic increase of fertility by their practices is not made out by any tangible proofs whatever. It might surely be that they are allowed to indulge in irregular amours simply as a set-off against the disability to own a human husband (just as certain African princesses, forced to remain celibate, are permitted consolations of the kind); and that, since their earnings, like themselves, are sacred and hence become the property of the temple, the prostitution is for financial reasons encouraged on a large scale, there being meanwhile no lack (as is seen even in quite primitive society) of women whose destitute position, quite apart from motives of religion, forces them into such a life. (4) There remain to be considered under a separate head cases where profane woman has intercourse with profane man under the sanction, as it were, of religion. (Yet another class (5), which primâ facie has nothing to do with religion at all, is constituted by those instances in which we find young women leading a loose life in order to carn a marriageportion). I wonder whether Dr. Frazer, in his pre-occupation with the fertility motif, has in this context been careful to distinguish proximate from remoter significance. Is it not very likely that the custom had come to be regarded as a sacrifice of an abnegatory kind, and perhaps specifically as a sacrifice, so to speak, of first-fruits? Of course, any rite duly performed would be regarded as luck-bringing; and this, where a woman was concerned, would practically amount to fertility-bringing, even though the idea of fertility was extrinsic to the constitutive meaning of the rite in question. Lying at the root of the ceremony I suspect, with Mr. Hartland (see his important paper, "Concerning the Rite at the Temple of Mylitta," in Anthropological Essays presented to E. B. Tylor), a puberty ceremony. On the analogy of other puberty ceremonies, I think it quite probable that some magical strengthening of the sexual powers was the primæval intention. But the whole matter remains exceedingly obscure. I would finally note how, of these five groups of cases which have been distinguished, only the fourth presents the features of a ritual act at all, and that a ritual act of a private, self-regarding character, not a public ceremony to secure fertility for the community in general in the matter of children, still less in the matter of crops.

I have left myself no room in which to go at due length into the interesting subject, broached by Dr. Frazer, of the influence of mother-kin on the forms of religion. In the case of the Khasis and the Pelew islanders he shows reason to think that such an influence has been exerted. The facts cited seem to point to some sort of ancestor-worship; but it is notorious that ancestor-worship is apt to prove somewhat ineffective in comparison with other formative tendencies in primitive religion. Meanwhile, Dr. Frazer protests in forcible language, which should be taken to heart in certain quarters, against two fallacies: (a) "Mother-kin does not mean mother-rule." "The "theory of a gynecocracy is in truth a dream of visionaries and pedants." (b) " Equally chimerical is the idea that the predominance of goddesses under a system of " mother-kin like that of the Khasis is a creation of the female mind. If women ever " created gods they would be more likely to give them masculine than feminine features. " In point of fact the great religious ideals which have permanently impressed them-" selves on the world seem always to have been a product of the male imagination. " Men make gods and women worship them." After this robust confession of faith, who will venture to class Dr. Frazer amongst the feminists?

A word in conclusion. This first instalment of *The Golden Bough*, as raised triumphantly to the third power, is a model of what a scientific exposition should be. The innumerable facts are collected, as needs must be, in support of a theory; yet the theory is not allowed to do violence to the facts, but, on the contrary, at all points waits upon them. Whatever be the limits eventually set upon what may be called the Mannhardtian hypothesis, it has at least served in Dr. Frazer's hands to colligate by far the most comprehensive account in existence of the magico-religious ideas and practices of savage and proto-historic man.

R. R. MARETT.

#### Asia : Craniology.

Turner.

A Contribution to the Craniology of the Natives of Borneo, the Malays, the Natives of Formosa, and the Tibetans. By Principal Sir William Turner, K.C.B., D.C.L., F.R.S. ("Transactions of the Royal Society of Edinburgh," Vol. XLV., Part III., No. 28). Pp. 781-813, five plates. 1907.

In a series of very remarkable memoirs Sir William Turner has systematised and augmented our knowledge of the craniology of various Asiatic races. In the first three, appearing between 1899 and 1906, he dealt with crania and races found within the widely spread borders of our Indian Empire. In the present memoir his labours are transferred to the Far East—to the inhabitants of Borneo and Formosa. The material on which these memoirs are based rests on the shelves of the Anatomical Museum of the University of Edinburgh; for the greater part it has been presented

by former pupils who have held medical appointments abroad. The foresight and influence which gathered the material in Edinburgh, and the masterly manner in which it is described and elaborated in these memoirs compel our admiration.

In the memoirs twenty-three crania are described: fifteen are from North Borneo. two are pure Malays used for comparison, four are from a tribe in the southern part of Formosa (Botans), while the remaining two are from Tibet. The number of crania is limited, but they yield a welcome addition to our present scanty knowledge of the craniology of the races to which they belong. The chief interest of this memoir. however, lies in the author's application of craniological methods to the analysis of the racial constituents in the mixed inhabitants of the south-east division of Asia and neighbouring islands. Throughout that part of the world Sir William Turner recognises four chief races: (1) the Negrito, represented by the Mincopies of the Andaman Islands, the Semangs of the Malay Peninsula, the Aeta pygmies of the Philippine Islands; (2) the Mongolian; (3) the Malay; (4) the Indonesian. It is the lastnamed race that is chiefly treated in this memoir. The term Indonesian is used "to " designate tribes in whom the head and skull are dolichocephalic in form and pro-" portion, or approximating thereto with a mesorhine nose, brown skin, varying in the " depth of tint, long straight black hair, short stature, 5 feet 2 inches to 5 feet 4 inches." To that race he assigns the Kalamantans, tribes in North Borneo, skulls of which are herein described; Battaks of Sumatra; certain mountain tribes in Java, described by Kohlbrügge; corresponding types found in Timor, Celebes and Sulu Islands; certain tribes described by Koeze in the Philippine Islands; the Botans of Formosa; the Sakais or Senoi of the Malay Peninsula; the Selungs of Mergui; the Mois of Cambodia; certain hill tribes of Burma; the Veddahs of Ceylon and those tribes scattered throughout India which are grouped under the name of Dravidians. The sea Dyaks and sea gypsies he regards as a mixture of Indonesian and Malay, the Malay influence leading to a shortening and widening of the skull. So far, no trace of a negrito element has been found in either Borneo or Formosa. A. K.

# Malay Peninsula: Craniology.

Schlaginhaufen.

Ein Beitrag zur Craniologie der Semang. By Dr. Otto Schlaginhaufen. (Abhandlungen und Berichte des Königl: Zoologischen und Anthropologisch-Ethnographischen Museums zu Dresden, Band XI., 1907, No. 2.) Pp. 50. 33 × 27 cm. Price 7 marks 50.

The crania described in this memoir were collected by Dr. Grubauer, who vouches for the authenticity of the specimens. They are designated crania of the "Gunung-sapi," this being the name of the tribe to which they are attributed. Dr. Grubauer obtained a third Semang skull, which is referred to as of the "Bukit-sapi" tribe, and this specimen was purchased by the late Professor C. Stewart for the Hunterian Museum in London.

The two skulls of the "Gunung-sapi" are male and female respectively. Dr. Schlaginhaufen has made an exhaustive study of their osteological characters and his memoir will serve as a model for the guidance of those who desire to test erania by means of the latest and most approved methods of examination. The text is abundantly illustrated, chiefly with reproductions of the admirable tracings which can be made by means of the very accurate drawing apparatus devised by Professor Martin.

Crania of pure-blooded Semang aborigines are so rare in collections that the minuteness of the investigation here detailed is easily justified. The author brings into comparison eight other skulls, the provenance of which is sufficiently well known to allow of their being regarded as of genuine Semang stock, and these eight examples are distributed among no less than six collections.

As a result of his research, Dr. Schlaginhaufen concludes that the characters of the

two crania fall within the limits of variation presented by the specimens already known. It is noteworthy that the two "Gunung-sapi" crania contrast rather markedly with each other in respect of the cephalic index. Even this character is, however, shown by the useful tables of comparable measurements (II) to be extraordinarily inconstant among the Semang, for in the ten records here treated extreme examples of values of this index occur and are represented by the figures 72.3 and 85 respectively. In these respects the Semang natives appear to differ from certain other types. As in other small crania (of whatever provenance) the muscular attachments are but indistinctly impressed upon the cranial surface.

The author concludes by pointing out that he has applied to these skulls all the tests regarded by Professor Schwalbe as diagnostic of specific differences between the recent human types and those of the Neanderthal-Spy group. As a result, Schwalbe's conclusion (that the crania of Senoi, Semang, and Andamanese are not specifically different from the other existing human races) finds support in Dr. Schlaginhaufen's work.

W. L. H. DUCKWORTH.

## ANTHROPOLOGICAL NOTES.

WE are glad to learn that a donation of £4,000 has been made to the building fund for the new Museum of Archæology and of Ethnology, Cambridge, which is so urgently required. This generous sum has been given "In memory of the late Walter K. Foster" by the following members of his family, who have each subscribed £1,000, viz.:—Mrs. Walter K. Foster, E. Bird Foster, Esq., Charles Finch Foster, Esq., and Mrs. Edward Rawlings. It may be remembered that Mr. Foster bequeathed his entire collection of selected local and other antiquities to the museum in 1891. These generous contributions, with what was already subscribed, brings up the total of the subscription list for the proposed museum building, to close on £8,000, so that only a comparatively small sum remains to be collected before the building committee will be enabled to commence operations. It is expected that the cost of the proposed building will, before completion, amount to the large sum of £25,000.

The Gypsy Lore Society was founded to promote the study of gypsy history, language, customs, and folk-lore. Circumstances have, however, arisen which render it necessary to extend its sphere and take into account the social condition of the race. The gypsies are to be attacked, not by individual rulers or municipalities, but by a combination of all the governments of Europe. Negotiations have been in progress between France and Switzerland with the object of expelling the gypsies from Europe, and an international conference is to be summoned for that purpose at Berne during next summer. Germany and Great Britain have already accepted invitations to send representatives. The Gypsy Lore Society is taking action in the matter, and Mr. J. H. Yoxall, M.P., one of its members, has already approached the Foreign and Home Offices, and will do his best in Parliament "to keep for the gypsies," as well as for other people, that opportunity of asylum and that liberty to live, "move, and have their being, which have long been one of the elements of common "freedom in our land."

THE Vice-Chancellor of the University of Oxford has received from Dr. Henry Wilde, the founder of the Wilde Readership in Mental Philosophy, £100, given by him "in aid of the work of the Committee for Anthropology."

THE death is announced of Mr. Morris K. Jesup, President of the American Museum of Natural History, with whose name is associated the expedition to the countries bordering on the North Pacific Ocean.



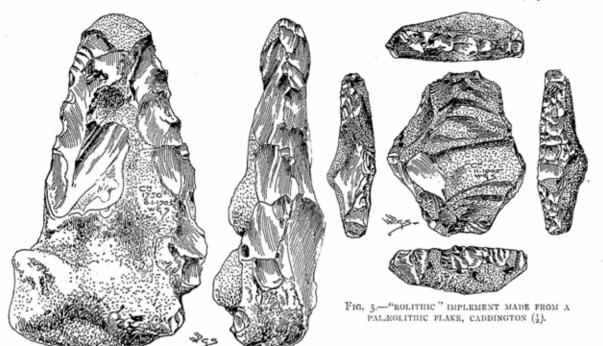


Fig. 1 .- Caddington (1).

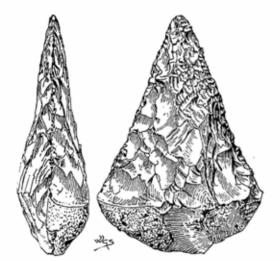


Fig. 4.- Caddington (1).

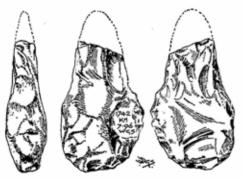


Fig. 3.—Kensworth  $\binom{1}{2}$ ).

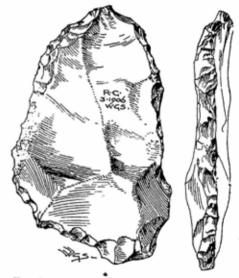


Fig. 6.—" Eolithic" implement made from a palæolithic flake, caddington (\(\frac{1}{2}\)).



Fig. 2.—Caddington  $(\frac{1}{2})$ .

## ORIGINAL ARTICLES.

England: Archæology. With Plate D. Smith.

"Eoliths." By Worthington G. Smith, F.L.S.

When Professor Prestwich published his paper on The Primitive Characters 26 of the Flint Implements of the Chalk Plateau of Kent, in the Journal of the Anthropological Institute, Vol. XXI., 1892, he appended a note at p. 247, in which he stated that "similar flint implements" had "also been found by Mr. Worthington Smith on "the hills near Dunstable, at heights of 596 and 760 feet, in positions away from "existing river valleys." In a letter in my possession Professor Prestwich "co-relates" the implements found on the Dunstable plateau with those found on the similar Kentish plateau. I also have a postcard in which Professor Prestwich requests me to make notes as to the high-level implements and the red clay-with-flints. At that time I was familiar with plateau implements.

As many years have now passed since my attention was first directed to these objects, it may possibly be of interest if I give the conclusions at which I have arrived regarding the North Herts and South Beds plateaux and their implements.

Early Searches on the Plateaux of the East of England.—Some years before 1871 my late friend, Mr. Henry Prigg, the well-known geologist and antiquary of Bury St. Edmund's, whose name occurs so frequently in Evans' Stone Implements of Great Britain, called my attention to the paleolithic flint implements found by him on the high-level position at Barton Hill, one-and-a-half miles south of Mildenhall, Suffolk. Mr. Prigg sent me a drawing of a section taken through Barton Hill and Warren Hill, with the River Lark flowing between. In his accompanying letter he wrote: "The discovery of implements in the gravel of Barton Hill has not yet been published, " but it will be included in a paper I have for some time been preparing for pub-" lication. The majority of implements found there are mere naturally fractured " stones, either used as they were, or adapted for use by a few additional flakes being " struck off them." In another letter Mr. Prigg wrote: "The stones from Barton " Hill are in many cases natural fractures, leaving a sharp side edge, and this has " been plainly worked off by rough use. In other cases the natural fracture is improved " upon to produce a handier implement. They are moderately abundant in the pits, " and now and then a better formed implement turns up."

Mr. Prigg here referred to the rude minor forms of palæolithic implements now called by some observers, "eolithic" implements, and he notes that "better formed implements" accompanied them. This is my experience on the North Herts and South Beds plateaux.

The paper Mr. Prigg was then preparing was one he afterwards forwarded, with drawings, to the Prehistoric Congress of Bologna in 1871, one year before the publication of Evans' Stone Implements. In this he referred to high-level tools as "plateau" implements. Mr. Prigg sent the paper to me for perusal with examples of the stones. I have not seen the Bologna report, but the paper was printed in English, in abstract form, without illustrations, under the name of "Notes upon some Discoveries " of Flint Implements in the Quaternary Deposits of the East of England," in the Journal of the Norwich Geological Society, March 1882. Mr. Prigg sent a copy of this paper to antiquaries and geologists.

At p. 163 of this paper Mr. Prigg says: "Other implement-bearing gravels are " found upon the top of some of the higher ground in the vicinity of the outfall of " these rivers "-Ouse and Lark-" which ground attains an elevation of from 90 to " 120 feet above the water level. These gravels, although of similar materials to " those of the lower-level beds, now form part of no valley series and are of great " antiquity. It is probable that some of the more worn implements found in the "lower beds may have been derived from their waste." On p. 164 he says: "Similarly situated, but to the south of the valley of the Lark, a deposit of plateau gravel containing flint implements occur at Barton Hill, 1½ miles distant from, and fully 120 feet above, the River Lark." Mr. Prigg concludes by saying: "A vast antiquity must be assigned to the implements; at the same time, the evidence thus far, fairly interpreted, will not allow us to assign to any of the beds containing them a greater age than those usually classed as quaternary or post-glacial."

The evidence of the Dunstable position points to conclusions identical with those formed by Mr. Prigg.

About the time of the writing of this paper, 1869, a high-level palæolithic implement was found by Messrs. Prestwich and Evans at Currie Farm, Halstead, at a height of 600 feet.

In 1882 Mr. Henry Prigg returned to this subject in a report on the drainage works at Bury St. Edmund's published in the Norwich and Bury Post. Writing as to the dates of his discoveries of palæolithic implements in 1865-7, he says: "Afterwards I "successfully sought them in the high-level deposits of Westley, Risby, Kentford, and Rougham, stations occupying nearly the highest points in their respective localities, and far removed from the influence of any river now draining the district." Further on he remarks: "That the high-level gravels were deposited by river action is abun-"dantly proved by the presence in them of shells of snails, &c., identical with those now living in our streams, whilst their height, far above the greatest floods of the "present rivers, proves that the valleys must have been excavated since they were "deposited."

Mr. Prigg, who was hon. curator of the Bury Museum, sent this report to his geological and archeological friends.

The Dunstable Plateau.—The Dunstable plateau at its highest point is 800 feet O.D. and more than 200 feet above the nearest valley. Its lowest elevation is 530 feet O.D. and 75 feet above the nearest dry valley. The high-level positions are Dunstable Downs, Blow's Downs, Caddington, Kensworth, Round Green, Ramridge End, and other places. The hills are of lower chalk, capped in an irregular manner by patches of the Reading beds, red clay-with-flints, boulder clay, in a washed and relaid condition, stones which at one time belonged to boulder clay and various blocks and pebbles derived from glacial and outlying tertiary beds. In many places brick-earth occurs, composed of washings from these deposits and it varies in colour according to the nature of the deposit from which it has been washed. In some places there is an upper-capping of contorted drift.

In the brick-earth palæolithic implements of the latest date occur; this is shown by their small, refined, geometrically perfect and beautiful forms, they are unabraded and detached flakes are capable of replacement. These implements are only mentioned here because they prove that although they belong to the latest of palæolithic times, yet they are older than the excavation of the valleys. The valleys, if they existed, could only have been in an initial state.

The Contorted Drift.—This is of the greatest importance, it is post-glacial and newer than the boulder clay. Glacial deposits and boulder clays occur in the neighbourhood of Dunstable, and, as far as my experience goes, especially during the last twenty-two years, they are absolutely without a trace of human work. The contorted drift is deep red-brown in colour, highly tenacious and commonly, though not invariably, contorted. I have seen it at Kensworth 40 feet deep, with late, sharp, palæolithic flakes at its base; it is commonly about 4 feet deep and sometimes it is weathered away to a few inches. It contains local stones belonging to the local deposits already mentioned. No stones in it have been brought direct from a long distance, all are derived from local and relaid deposits in the neighbourhood. Its chief interest is

found in the fact that it contains palaeolithic implements and flakes of various degrees of antiquity, side by side, and in the same mineral condition as those called by some observers "eolithic" implements. The implements and "eoliths" vary from sharp to greatly abraded and from deep brown to white. Any observation or criticism that applies to one applies with equal force to the other. The explanation is clear: the contorted drift picked up and fixed in its own tenacious substance all the stones that were resting upon the surface of the ground at the time of its deposition. These stones included all the local stones of the district, including older and newer palaeoliths, and their ever-accompanying "eoliths."

"Eoliths."-What are "eoliths"? At the present day all kinds of oddities in flint are passed off as "eoliths": one author says the examples must be bulbless; another describes well-formed bulbs. One says the secondary flaking is vertical, another that it is lateral. Sometimes a proof of authenticity is said to rest on the fact that the stones in question present no flaking at all, only rubbing. If museums are visited one sees ordinary paleoliths masquerading as "coliths" and rubbing shoulders with minor well-known paleolithic forms, iron-stained neoliths, surface flints, and late Victorian oddities of all sorts. Professor Prestwich himself could not always distinguish paleoliths from "plateau" examples, for he says, in his Controverted Questions in Geology: "I do not wish to assert that all the plateau implements are of so distinct " a pattern that they can always be distinguished from the valley implements" (!); and, " Besides the implements of different patterns, there is a large, probably the larger, " number, which, though not the result of chance, show no special design"; and again, " A few large implements have been found equalling in workmanship and finish some " of the best of the valley specimens" (!). He says twice that the work on some of the "plateau" implements "is so slight as to be scarcely apparent." To add to the reader's uncertainty on the question of "plateau" implements the great geologist has given twelve incorrect references to his forty-one figures. It is known that Professor Prestwich at the time of writing his later papers was ill, overworked, and worried.

The conclusion I have come to is, that there are no such things as "eoliths" at all, nine out of ten of the thousands sent on to me for an opinion have been nothing but natural flint fragments, the tenth has been a minor and well-known paleolithic or neolithic form, or may be a bulbed, iron-stained, Victorian flake, knocked off by the hoof of a farm animal.

"Eoliths" on the Dunstable Plateau.—" Eoliths" as such—to me—do not exist; all the different flint forms illustrated and described by Professor Prestwich and others, all the varieties seen in museums and private collections, occur near Dunstable in abundance; there is no line of demarcation between a paleolithic implement and an "eolith," as regards the weathering, abrasion, mineral condition and colour. The artificial gradually fades into the natural, the latter being in a large majority. Surely it is useless to argue whether a small doubtful piece rubbed out of the edge of a flint is artificial or natural, it is sheer waste of time. There is at Dunstable no archæological, geological, or osteological evidence that any of the worked stones on the plateau are so old as the boulder clay.

Only a few words need be said as to the genuine Dunstable high-level palæolithic implements, they entirely corroborate the statement made by Professor Prestwich, that implements occur from the rudest to the most highly finished. The four accompanying figures (Plate D., Figs. 1, 2, 3, and 4), drawn to half scale, show the varieties of implement; all are more or less abraded and discoloured. Figs. 1, 2, and 3 are of the abraded class. Fig. 3 is greatly abraded and deep brown in colour. I found it at Kensworth at a height of 760 feet and 210 feet above the nearest dry valley. There is no river near. Nothing older occurs in this neighbourhood nor, as far as I have

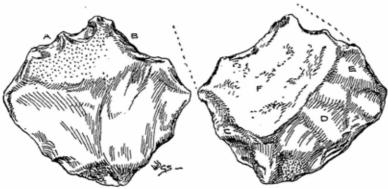


FIG. 7 .-- A KENTISH "EOLITH," APPARENTLY MADE FROM THE BASAL PORTION OF A PALÆOLITHIC IMPLEMENT. (1 SCALE.)

seen, anywhere else in England. Fig. 4 is an elaborately made and highly specialised form of the older class.

More may be said as to the "eoliths." The two stones illustrated Figs. 5 and 6 would, without

doubt, be accepted as genuine "eoliths" by any believer in these dubious stones.

At Fig. 5, Plate D, is illustrated, in five views, to half scale, a typical "eolith" from the Dunstable "plateau"; it is a "pronounced" example with typically bruised, or

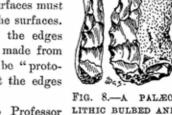
vertically flaked edges. The surface of the stone, shown by dots, is abraded, ochreous, and of human origin; the edges are newer, unabraded and creamy-livid in colour. If, therefore, the edges are "colithic," it follows that the ochreous, human-made surfaces must be "pre-eolithic" as they are undoubtedly older than the surfaces.

Fig. 6, Plate D, is another and similar example, the edges show it to be an unmistakable "eolith," but it is made from a large, greatly abraded, artificial flake which must be "protocolithic," as the surfaces are older and abraded, whilst the edges are newer and unabraded.

Turning for a moment from the Dunstable to Professor Prestwich's Kentish plateau, Fig. 7 is an accepted Kentish



FIG. 9 .- BASAL PORTION OF A KENTISH PALÆOLI-THIC IMPLEMENT SENT OUT AS A "PURE EOLITH" FROM A PURE "EOLITHIC" STRATUM. (1 SCALE.)



"eolith," sent

FIG. 8.-A PALÆO-LITHIC BULBED AND TRIMMED FLAKE DO-ING DUTY AS AN "EOLITH" IN THE to me amongst BLACKMORE MUSEUM, others for illus- SALISBURY.

(½ SCALE.) tration by Mr. Benjamin Harrison, and labelled "Kent Plateau, 10 Aut. 2." edges A and B are paler than the body of the stone, which is darker and older. On turning this accepted "eolith" over, it is seen to resemble the basal part of an ordinary abraded paleolithic implement. The palæolithic and abraded part at D, E, is scratched, whilst the "worked part" is unscratched. F is an old frost-break.

Of late still another aspect has been given to the subject of "eoliths"; the characters are always varying; there is no finality or permanency in any of them. It is said that in certain favoured

positions paleoliths have "never" been found in situ with the "coliths." "never" is a long time. Take this example: There is a high-level position near Whipsnade Heath, near Dunstable; everything is favourable at this place for a I have known the place well, and constantly visited it discovery of palæoliths. ever since I first began to notice implements, and have never met with an example there. This year a digger, known to me, was sent to dig stones for the road near Whipsnade Heath, and as soon as he began to dig he turned out a superb ochreous ovate implement, now No. 1,792 in my collection. Another example: Close by Dunstable is Blow's Downs, a place even more familiar to me than Whipsnade Heath. There are a few stains of brickearth on the fields of naked chalk, and I have never found anything like a paleolith on that part of the high ground. In October last a scholar from the Dunstable Grammar School in walking over the downs kicked his foot accidentally against a stone. On looking down he saw this stone to be a fine ovate palæolithic implement. He recognised the shape from having seen a small collection of implements given by me to the Grammar School here, and by others in my workroom. One should think twice before using the word "never."

To return to the pure "colithic" strata. One of these positions is said to be at Alderbury, near Salisbury. I am deeply indebted to the kindness of Dr. H. P. Blackmore for obligingly sending me twenty-four examples from this position for illustration. One of these is given, to half scale, in Fig. 8. This specimen instead of being an "colith," is on the face of it a good bulbed flake with very skilful, lateral paleolithic



FIG. 10.—JACOBEAN SCRATCHED EXAMPLE OF "EOLITHIC" FORM IN BOTTLE GLASS, RAM-BIDGE END, LUTON. (½ SCALE.)

flaking. There is in the Blackmore Museum, amongst "coliths," a second and finer piece of work of this class five inches long from the same locality.

Another accepted "eolith" from a Kentish "pure stratum" is illustrated to half scale in Fig. 9. It was kindly forwarded to me, with others, for illustration by Mr. B. Harrison, from an "eolithic" position called, and the

stone labelled, "Two Chimney House, E. 730 O.D.," a position from which no palæolithic traces had ever, it was said, been found. It will be seen that this pure "eolith" looks considerably like an ordinary palæolithic implement with the point knocked off.

In the earlier part of these notes I wrote of Victorian "eoliths." In Fig. 10 is illustrated a Jacobean "colith." No one can look at the illustration without recognising the pure "colithic" form and the genuine vertical "colithic" chipping as seen on the edge view. The Jacobean "glacial" scratches on the surface should also be noticed. Prehistoric objects are not generally dated, but this example bears the date in bold embossed characters, "1686." The material is glass; it is part of a thick, old dated bottle, and the vertical flaking was done by the boots of agricultural labourers, by the hoofs of farm animals, and by contact with farm implements. I found it in a high-level paleolithic position at Ramridge End, Luton.

Conclusion.—(1) The majority—nine out of ten of "eoliths"—are natural stones not intentionally touched by man.

- (2) The minority are of human origin, but of well-known paleolithic or neolithic forms; these paleolithic minor forms being always found in company with paleolithic implements.
- (3) There is no evidence that any of the minor palaeolithic forms, often termed "eoliths," are so old as the boulder clay. WORTHINGTON G. SMITH.

Physical Anthropology: Pigmentation.

Gray.

# A New Instrument for Determining the Colour of the Hair, Eyes, and Skin. By J. Gray, B.Sc.

The classification of hair, eye, and skin colours has hitherto usually been made in accordance with the observer's estimate of the meaning of certain commonly used colour names. Udny Yule has shown (Journ. Anthr. Inst., Vol. XXXVI., p. 325) that this method leads to a very great inconsistency between the statistics collected by different observers, and even to a considerable inconsistency between statistics collected by the same observer at different times. The value of pigmentation statistics collected in this way is consequently very much reduced.

Many attempts have been made to reduce the personal error by making a standard scale of colours to be used in matching the colour of the person observed. A set of sample locks of hair has been used. But the objection to this is the difficulty of reproducing an exact facsimile of the scale any required number of times. An exact match to a standard lock can only be got by selection from a very large stock, and scales produced in this way would be expensive. Besides, there is some reason for believing that the colour of locks of hair is not permanent.

Attempts have also been made to reproduce the colours of locks of hair, eyes, etc., by colour lithography, but these have usually been failures. I myself employed one of the best firms in this country to reproduce a series of locks of hair and a series of glass eyes by the three-colour photo-mechanical process, but the results were not of any practical value. None of these processes are apparently sufficiently advanced to reproduce shades of colour with sufficient exactness for scientific purposes, though they are capable of producing beautiful pictorial effects.

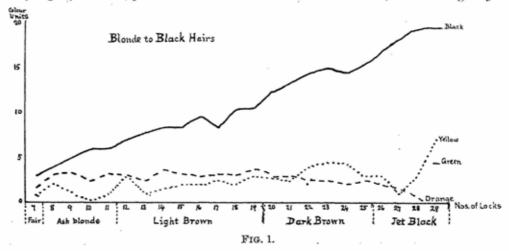
I had for several years thought that the solution of the problem of the exact measurement of pigmentation would be effected by an instrument on the principle of Mr. Lovibond's tintometer, but I had not the opportunity of submitting the question to Mr. Lovibond until a few months ago.

The Lovibond tintometer is an optical instrument similar in construction to a stereoscope, but with ordinary lenses instead of the prismatic stereoscopic lenses. Under one eye is placed the object of which the colour is to be measured, and under the other eye a pure white surface, both the object and the surface being equally illuminated by diffused white light, the intensity of which must be within certain defined limits. Between the eye and the white surface one, two, or three glasses of red, yellow, or blue colour and of graduated density are interposed, till an exact match with the coloured object is obtained. From the values of the glasses used the exact amount of each colour constituent in the coloured object can be ascertained.

In a simpler form of the instrument there is one lens, both the coloured object and the white surface being viewed by one eye.

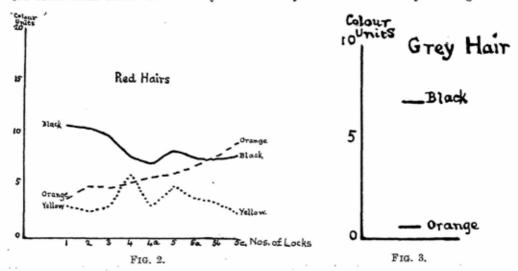
The complete set of graduated glasses consists of three series, representing scales of red, of yellow, and of blue. The density of each colour is divided into 155 equal degrees, each of which is represented by a coloured glass. Three glasses—red, yellow, and blue—of equal density absorb white light, so that the white surface, when viewed through such a triplet, shows no colour, but is merely reduced in brightness. When a colour measurement is made with three glasses the maximum triplet of equal red, yellow, and blue, which can be subtracted from the readings of the glasses used, measures the amount of white light absorbed by the coloured object, i.e., its degree of neutral tint or blackness. Equal quantities of the remaining two colours, say, red and yellow, are then combined to form the colour lying between them in the spectrum, say orange. If there is still an excess of one colour left, say yellow, we conclude that the colour of the object is yellow-orange, mixed with a definite amount of black.

With his tintometer Mr. Lovibond and his staff have made an exact measurement of the colour constituents of a series of thirty-four locks of hair, which I submitted to him, and the results are of the greatest theoretical interest. This series starts with very light fair hair, passes on to what Retzius calls ash blonde, then through light



brown and dark brown to jet black. At the other end of the series a number of red locks are arranged, commencing with brilliant light red and passing on by steps to dark red or auburn.

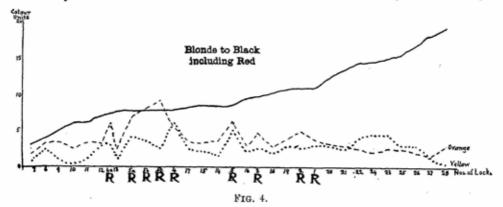
Before this series was submitted to Mr. Lovibond for measurement the locks had been arranged by several persons independently, in what appeared to be the natural order of their colour. The result of the colour measurement by the tintometer is shown by Mr. Lovibond in a curve (Fig. 1), which he has kindly permitted me to use. From this we see what constituent has been predominant when the colours were arranged in the series from blonde to black by the naked eye. It was evidently the degree of



blackness that determined the position of a lock in the scale. With one or two exceptions the curve of blackness rises with fair uniformity from the blonde to the jet-black end of the series. Of the other two colour constituents, orange is practically constant for nearly the whole length of the series, dropping nearly to zero at the blonde, and

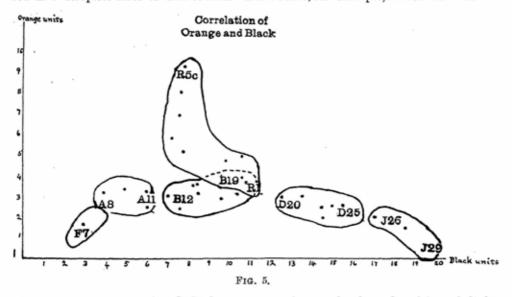
altogether to zero at the jet-black end. The yellow constituent is very erratic, and evidently could not be used as a basis of classification of the locks. Curiously enough, the amount of yellow is greatest, not in the fairest lock, as might be expected, but in the blackest lock of the series.

The series of red locks, for which a separate curve (Fig. 2) has been drawn, does not fit anywhere into the blonde-black series. The classification by the naked eye,



in case of red, is evidently based on the amount of orange, and not on the amount of black, as in the other series. To show how abnormal red hair is I have drawn a curve (Fig. 4) arranging the whole of the locks in the two series in order of blackness. It will be seen that the amount of orange, wherever a red lock occurs, changes per saltum, except in the case of the dark reds, which gradually approximate to the darker members of the light brown group.

Anthropologists have generally differed as to the correct position to be assigned to red in a complete scale of hair colours. Dr. Beddoe, for example, makes the order of



a hair-colour series, red, fair, light brown, etc.; others make the order, fair, red, light brown, etc. The analysis of the hair colours made by Mr. Lovibond explains how the confusion has arisen.

The true relation of red hair to the other colours is well shown, I think, by a chart (Fig. 5), in which the position of each lock of the series of 34, is determined by

co-ordinates representing the amount of black and of orange in the colour of the lock. It will be seen from this chart that the locks form a single band starting from jet black and moving towards the junction of the dark and light brown groups. At this point the band divides into two branches, in one of which (namely, the blonde) the orange decreases as the black decreases, and in the other of which (namely, the red) the orange increases as the black decreases.

It looks as if red hair were evolved from dark brown by converting a certain percentage of its black pigment into orange pigment. It would follow from this that red hair should be of rare occurrence in a very blonde population, because there is not sufficient black pigment to convert into orange pigment. This conclusion is confirmed by the observations of Virchow in North Germany, where only a very small percentage of red hair was found.

The Pigmentation Meter.—The modification of the tintometer which, after many trials, has been found most suitable for measuring the amount of pigment in hair, eyes, and skin, is shown in side and top view in Fig. 6. It consists of a single tube of rectangular section (1 inch by 1.4 inch) and 4 inches in length. At one end of the tube is an eye-piece with a lens, and in the other end are two rectangular apertures, side by side. Surrounding one of the apertures is a sheath or pocket

Surrounding one of the apertures is a sheath or pocket

into which one of the standard-coloured glasses (Fig. 6, a) is dropped. The bottom of the rectangular tube is extended about 2 inches beyond the end of the tube, where it is turned up nearly at right angles. On one side of this upwardly projecting piece is pasted a strip of white paper to form the white surface opposite coloured glass; and on the other side is a rectangular opening which

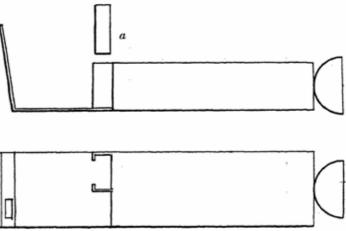


FIG. 6.

is placed over the hair, the eye, or the skin whose pigment is to be measured.

For ordinary field observations on hair colours it is sufficient to have seven categories, namely, light and dark red, fair, ash blonde, light brown, dark brown, and jet black. Glasses have been made up of three elements to represent the central colours of these seven groups. In determining the position in the scale of a given hair, the turned-up end of the instrument is pressed against the lock of hair or the coiffure of the subject. Standard glasses are then placed in succession in the pocket of the instrument until the best match is obtained. The name or number of this glass gives the correct position of the hair colour in the standard scale. Evidently the larger the number of standard glasses used the greater is the precision of the observation.

For eye and skin colours separate series of standard glasses should be made up from a standard series of eyes, or skins, in the same way as has been done for the hair.

Mr. Lovibond has suggested that glasses representing colours complementary to those observed might be used, in which case the coloured object would be looked at through the glasses till one was found which gave the minimum amount of colour.

Table of Analysis of Colours of Locks of Hair by the Tintometer.  ${\it Hair~Colours}.$ 

Number.	Black.	Orange.	Yellow.	Number.	Black.	Orange.	Yellow.
1	10.8	3.7	3.0	14	8.4	3.6	1.5
2	10.6	4.9	2.5	15	8.4	3.1	2.0
3	9.8	4.7	3.0	16	9.6	2.9	2.0
4	7.8	5.2	6.0	17	8.2	3.3	2.5
4A	7.2	5.8	3.0	18	10.4	3.1	2.0
5	. 8:4	6.1.	5.0	19	10.6	3.9	3.0
5A .	7.6	6.9	4.0	20	12.5	3.0	3 . 0.
5B	7.6	7.9	8.5	21	13.5	3.0	2.5
5c	7.8	9.2	2.5	-22	14.5	2.5	4.0
6	7.0	0.60		23	15.0	2.5	4.5
7	2.9	1.6	0.70	24	14.5	2.0	4.5
8	3.9	3.1	2.2	25	15.5	2.5	3.0
9	4.9	3.3	0.80	26	17.0	2.0	3.0
10	6.0	2.4	0.20	27	18.5	1.5	1.0
11	6.0	3.2	1.0	28	19.5	0.50	3.0
12	7.0	3.0	3.0			Green	
13	7.6	2.4	1.0	29	19.5	4.5	7.0

# Glasses used for the Measurements.

Number.	Red.	Yellow.	Blue.	Number.	Red.	Yellow.	Blue.
1 .	14.5	17.5	10.8	14	12.0	13.5	8-4
2	15.5	18.0	10.6	15	11.5	13.5	8.4
3	14.5	17.5	9.8	16	12.5	14.5	9.6
4	13.0	19.0	7.8	17	11.5	14.0	8.2
4.4	13.0	16.0	7.2	18	13.5	15.5	10.4
5	14.5	19.5	8.4	19	14.5	17.5	10.6
5A.	14.5	18.5	7.6	20	15.5	18.5	12.5
őВ	15.5	19.0	7.6	21	16.5	19.0	13.5
5c	17.0	19.5	7.8	22	17.0	21.0	14.5
6	7.6	7.6	7.0	23	17.5	22.0	15.0
7	4.5	5.2	2.9	24	16.5	21.0	14.5
8 -	7.0	9.2	3.9	25	18.0	21.0	15.5
9	8.2	9.0	4.9	26	19.0	22.0	17.0
10	8.4	8.6	6.0	27	20.0	21.0	18.5
11	9.2	10.2	6.0	28	20.0	23.0	19.5
12	10.0	13.0	7.0	29	19.5	31.0	24.0
13	10.0	11.0	7.6				

J. GRAY.

Solomon Islands.

Reid.

Decorated Maces from the Solomon Islands. By  $Professor\ R.\ W.$  Reid, M.D.

In the last issue of Man, March 1908, Baron von Hügel describes two decorated maces from the Solomon Islands and says that he can only trace six other examples, and that these are contained in museums in London, Dresden, and Sydney.

It will be of interest to state that there is shown in the Anthropological Museum of the University of Aberdeen a beautiful and perfect specimen from Saa, Melanta or Malaita, Solomon Islands, lent to the museum by Sir William Macgregor, G.C.M.G., C.B., M.D., LL.D., formerly Administrator of British New Guinea and now Governor of Newfoundland.

This mace or sceptre is fully described and figured by Professor Eurico H. Giglioli in Arch. per l'Antrop., Firenze, Vol. XXVIII., 1898. R. W. REID.

Folklore. Partridge.

The Killing of the Divine King. By C. Partridge, M.A., F.S.A., F.R.G.S., District Commissioner in Southern Nigeria.

As a further illustration of Professor Westermarck's interesting article,\* I beg to contribute an extract from my Cross River Natives (Hutchinson & Co., 1905), p. 200 et seq. The Cross River flows from the German protectorate of Kamerun, through the eastern parts of Southern Nigeria, into the Calabar estuary and Gulf of Guinea.

Etatin is an Atam village on the right bank of the Cross River, just above the mouth of the Aweyong, and about 160 miles above Calabar. "It is a small compact "town with huge boulders of dark basaltic stone on its beach. The head-chief's " compound stands rather back from the river, on ground well above the high-water " mark of the rainy season. Hearing that Chief Ekpei Mbei was forbidden by native " custom to leave his compound, I set aside the usual etiquette, and visited him "there (16 December, 1903). The people made no difficulty about my seeing their " semi-divine ruler, and the minor chiefs and many other men and boys accompanied " me and squatted on the ground during my interview with him. The back and " sides of the compound are formed by the huts of his household, but the front or " fourth side, which faces the river, consists of only a low rough fence, so that those " living within can easily see the river and the passing canoes. In the middle of " this enclosure is the chief's 'palace,' a round hut with an entrance at one end. "Its conical roof is surmounted by a human skull, and all round, between the eaves " and the top of the low clay wall, there is an open space, so that the interior is " quite visible from outside, and those inside can see all that takes place in the " compound. Mud couches occupy two sides of this hut. About a score of human " skulls hang all round, and a big bunch of them is suspended from the roof at "the back, where also are two big wooden jujus and several smaller ones hanging " from the rafters. In another place are hanging a crocodile's jaw-bones. On the " ground, at the foot of the chief's couch, are arranged certain regal or juju insignia-" a small wooden figure between two buffalo's horns, a curious knife, and a large " earthen pot. He spends the whole day here, but sleeps at night in one of the " huts of the outer circle. When I entered, Ekpei Mbei was reclining on a mat. "He is an old, rather good-looking man, with a gentle, pleasant expression on his " face. He wore a blue loin-cloth and red stocking-cap. His grey beard has a long "twisted tuft of hair hanging down in front. During the interview he sat on his " clay couch, his bare feet resting on two highly-polished human skulls half-imbedded " in the floor. Two similar skulls were near the entrance. He seemed pleased to

" see me, and was quite willing to talk about himself and to answer any questions " put to him. 'The whole town,' he said, 'forced me to be head-chief. They hanged " 'our big juju' (the buffalo's horns) 'round my neck. Had I refused, I should have " 'had to give them the value of two slaves. It is an old custom that the head-chief " 'here shall never leave his compound. I have been shut up ten years, but, being " 'an old man, I don't miss my freedom. I am the oldest man of the town, and " 'they keep me here to look after the jujus, and to conduct the rites celebrated " 'when women are about to give birth to children, and other ceremonies of the same " 'kind. By the observance and performance of these ceremonies, I bring game to " 'the hunter, cause the yam crop to be good, bring fish to the fisherman, and make " 'rain to fall. So they bring me meat, yams, fish, etc. To make rain, I drink " 'water, and squirt it out, and pray to our big deities. If I were to go outside " 'this compound, I should fall down dead on returning to this hut. My wives cut " 'my hair and nails, and take great care of the parings. I have married twenty-five " 'women; five are now living.' While he talked, a very attentive wife crouched " behind him just outside the hut, and prompted him and put him right in his " replies. I examined the two big wooden jujus. They are sections of tree-trunks " hollowed out and elaborately carved outside into successive circles of the lozenge " and chevron patterns. The front is meant to represent a human face-an O-shaped " aperture filled in with great wooden teeth, and, above it, a nose and two eyes. " At each side there are rectangular apertures for the arms. Both these jujus are " surmounted by figures of a hippopotamus and a monkey of one piece with the " lower part of the wood. There are four smaller jujus of similar design, three of " which are surmounted by what looks like a dog's figure, and the fourth by a hippo. " On being questioned about the contents of his hut the old chief answered, 'I found " 'these skulls here when I came. They are those of people killed in war by our "'forefathers. The other Atam towns do not acknowledge me-each has its own " 'chief. When the king of this town dies, the big wooden jujus are put over men's " 'heads, and they dance, and women carry the smaller ones on the top of poles,' " On my asking if two of his people might put on the bigger jujus and dance before " me, Ekpei Mbei and his subjects were quite alarmed. He said that if the towns-" people, or any of my men, or even I myself, were to put the jujus over our heads, " he would certainly die, for they were never used except at the death of the " head-chief."

It seems not improbable that, just as the Sultan of Morocco's sauctity was, it seems, "considered to be inherent in the throne" (Professor Westermarck, p. 23), and as, in some parts of the Malay region, the regalia are, it appears, "regarded as "wonder-working talismans or fetishes, the possession of which carries with it the "right to the throne" (ibid., footnote §), and as, among the Yoruba of West Africa [Lagos], "a miraculous virtue seems to be attributed to the royal crown" (ibid.), so the transference of sanctity from one head-chief of Etatin to another may have been carried out by the hanging of their "big juju" (the buffalo's horns) round the new ruler's neck. "The whole town,' he said, 'forced me to be head-chief. They "' hanged our big juju' (the buffalo's horns) 'round my neck.'"

In connection with this transference of sauctity, it should be noted that, in some parts of West Africa, a new ruler is not considered to have begun his reign until his predecessor's body has been buried, for they hold that there cannot be two chiefs above ground at the same time. The corpse of the Atta Am Aga of Igaraland (River Niger), whose burial I attended in 1902, had been kept eighteen months unburied pending the choice of his successor.\* Up the Cross River, "bodies are

<sup>.\*</sup> See "The Burial of the Atta of Igaraland and the 'Coronation' of his Successor" in Blackwood's Magazine for September, 1904, pages 329-337.

- "thus preserved several months before being buried. Probably the reason is that "they like to keep their former head-chief's body above ground until his successor
- " has been elected, the interregnum not being so noticeable if they can still view
- " the body " (Cross River Natives, p. 240). C. PARTRIDGE.

## REVIEWS.

France: Archæology.

Villeneuve : Verneau : Boule. Les Grottes de Grimaldi (Baoussé-Roussé). Par L. de Villeneuve, R. Verneau

et M. Boule. Monaco, 1906. Three parts. Pp. 70, 156, 212. 36 × 28 cm. Quaternary man of the Mediterranean receives in these large folios a memorial as lasting as it is valuable. He has been recalled "from the vasty deep" with such success, that not only do we know much concerning his physical appearance, his surroundings, and manner of life, we even obtain some glimpse into the working of his mind. This fortunate state of affairs is partly due to the happy chance whereby the caves in which he lived remained sealed down to an age when archeology had been gathered to the exact sciences, partly due to the careful nature and exhaustive record of the excavations.

The grottoes are first described as regards their formation, position, and appearance, while an historical account is furnished of the changes they have undergone since Roman times. The deposits in the caves are next considered; they are shown to be extensive and stratigraphically continuous. Deep in the deposits surfaces can be recognised which, from the presence of cinders, flakes, or bones, give evidence of the presence of man. The fauna of the caves is described and classified according to the level at which it is found.

A full account is given of the discussion which arose as to the date of the deposits; the presence of remains of the reindeer in the highest layers proving that the deposits were properly ascribed by Rivière to the Quaternary period.

The site includes eight caves and one rock shelter; it has yielded the remains of some twenty individuals. With two exceptions they conform to a common type and bear a close resemblance to the skeletons from Cro-Magnon. Leaving the exceptions out of consideration for the present, the skulls from these caves are dysharmonic, the crania being long, the face low and wide. The nose is leptorhine and projects sharply from the plane of the face; the orbits are rectangular and microseme; the supraciliary eminences are faintly developed; the chin is prominent. The thorax is remarkably wide above, the proportions of lower limb to upper limb, of forearm to arm, and leg to thigh are high. In these proportions an approximation is made to the negro. The clavicle is long, compared to the humerus, which is short, the radius is flattened antero-posteriorly above the insertion of the pronator radii teres. The asperities on the humerus suggest great muscular development. The femur is pilastered, the tibia platyenemic, the fibula channelled; the patella is large, indicating unusual size of the quadriceps extensor. The metacarpals are long, the fingers short; the metatarsals and toes are of medium length. The prominence of the heel is exaggerated. The stature is high; the highest recorded was 1.94 m., the average of five males was 1.87 metres or 6 feet 1 inch.

The two skeletons which form the exceptions differ so much, in the opinion of Dr. Verneau, from the other skeletons as to constitute a separate type, which he has named the Grimaldi type. The skulls are dysharmonic, but the nose is platyrhine, the face markedly prognathous and the chin fuyant. The stature is, moreover, low. Before accepting Dr. Verneau's separation it must be premised that the skeletons are those of an old woman and a boy; further, the skulls were crushed, necessitating repair. For these reasons the value of stature is discounted and the presence in so marked a form of platyrhinity and prognathism may be questioned. It is interesting,

however, to observe that the two skeletons are the most ancient human remains recovered from these caves. The teeth of the boy are noteworthy. They are very voluminous, the molars surpassing in length even those of the Australian.

From the archeological section of the work we learn that burial customs were already introduced.

In Europe quaternary sites of so extensive a nature as that of Grimaldi are few; it is all the more important that when discovered they should be examined with scientific accuracy. In this instance anthropologists and archæologists are to be congratulated on the excellent way in which the work of excavation has been done, and on the sumptuous manner in which the results have been recorded. W. W.

Java. Jacobson: van Hasselt.

De Gong-Fabricatie te Semarang [Die Verfertigung der Gong in Sema rang]. By Edw. Jacobson en J. H. van Hasselt. (Publicatie uit 's Rijks Ethnographisch Museum, Serie II., No. 15.) Leiden: E. J. Brill, 1907. Pp. vi+64, 12 Plates. 33 × 25 cm.

The manufacture of gongs is one of the most important native industries of Java, for large numbers are exported to other islands of the Malay Archipelago where they are highly prized on account of their admirable workmanship and melodious tones. In Borneo, and doubtless elsewhere also, these gongs pass as currency, are received in exchange for jungle produce and are paid to defray fines imposed by chieftains or by European magistrates, in Sarawak the Javanese gong ranges in value from 30 to 100 Mexican dollars, whereas the value of the Chinese or of the home-made article is very small indeed. The gongs made in Borneo are cast by a circ-perdue process, and, though those formerly made in Brunei are most elaborately and beautifully decorated, their tone is of poor quality and resonance.

The authors of the memoir under notice describe with a wealth of detail the whole process of gong-making from the smelting of the bronze to the tuning of the finished instrument. The metal is an alloy of 100 parts of copper to thirty parts of tin and is smelted in an open hearth with charcoal. Blasts of air are driven on to the furnaces by means of a primitive type of bellows composed of a long bamboo tube with a large downwardly-directed nozzle of clay and lime at one end and a slit bag of goatskin at the other. A workman manipulates the goatskin bag with hands and knees so as to force at regular intervals a strong current of air through the bamboo and its clay nozzle on to the furnace. This is quite a different form of bellows from the double bamboo-cylinder and feather-piston type which is used in every other part of Malaya and we may have reason to suspect that it is an importation, though an ancient one, from India. The metal is smelted twice and then poured into a rough dish-like mould, whence it is transferred to another open furnace and manipulated by the master smith or "pandji." From time to time the white-hot metal is lifted from the furnace and laid on a stone anvil, where it is hammered into shape; a large gong is heated and reheated 150 times before it acquires its final shape. Flaws in the metal are repaired by an ingenious cire-perdue process. The gongs are finally made true and symmetrical with the help of simple yet quite effective appliances, and are tuned by hammering and by filing away part of the central boss, which is so characteristic a feature of Javanese gongs.

The cost of making the gongs of various sizes, the different shapes that are made, the places to which they are exported, all this is set forth by the authors. They omit, however, to say if any religious or magical ceremonies are connected with the craft, or if any particular odour of sanctity surrounds the craftsmen. That such was once the case seems likely enough, if there is anything in the view that the Javanese are Indonesians at a higher grade of culture than, let us say, the Kenyahs

of Borneo. Amongst the Kenyahs and Kayans all craftsmen are under the protection of definite tutelary spirits, and some, such as the tatu artists, are subjected to various tabus. It is doubtless the case that the Javanese have forgotten most of the ancient lore and traditions connected with the making of gongs, but perhaps relies remain, and they could be brought to light by judicious enquiry.

The memoir is printed in Dutch and German in parallel columns, and is supplied with twelve most admirable plates, reproduced from photographs of the gong-smiths at work, of the gongs in all stages of manufacture, and of the tools that are used.

The literary output of the Leiden Ethnographical Museum is considerable, and this, its latest effort, is well up to the high standard set by previous memoirs. It is melancholy to reflect that neither in England nor in our colonies do we attempt to rival these valuable publications.

R. SHELFORD.

### Africa, South.

Theal.

History and Ethnography of Africa, south of the Zambesi, from the Settlement of the Portuguese at Sofala in September, 1505, to the conquest of the Cape Colony by the British in September, 1795. By George McCall Theal, Litt.D., LL.D. Vol. I. The Portuguese in South Africa from 1505 to 1700. London: Swan Sonnenschein & Co., 1907. Pp. xxiii + 501. 22 × 14 cm. Price 7s. 6d.

Dr. Theal's History of South Africa has long been known as the most comprehensive storehouse of information and the best guide to original authorities on his subject in existence. It is regrettable to find that his documentary researches have been cut short, and that the work will never be as complete as he intended to make it, but this is no depreciation of its positive merits. In the new edition, Dr. Theal has incorporated The Portuguese in South Africa, originally an independent volume, with the main body of his History, which is to consist of two divisions, three volumes of History and Ethnography, and five of the History of South Africa under the British Government. The increased attention devoted to the native races, originally passed over with comparative brevity, is responsible for this expansion of the Portuguese. In the volume before us a chapter apiece is devoted to the Bushmen and the Hottentots, five to the Bantu, one to the interesting and as yet insufficiently examined subject of "Arab and Persian Settlements in South-eastern Africa," and the remainder to the record of European explorations and settlements down to the abandonment of Delagoa Bay by the Portuguese at the end of the seventeenth century. The extent of ground covered is thus seen to be very large, and Dr. Theal's previous work is a guarantee for the minute and patient industry with which the details are filled in. With regard to the origin of the Bantu he wisely refrains from committing himself to a theory. "The " question has not advanced beyond speculation, for no research connected with the " present inhabitants of South Africa has brought us with absolute certainty nearer to " the cradle of the various families, or given any clue to the origin of man himself."

Whether or not it is likely that "our present knowledge may one day be vastly "increased by the discovery and publication of Arabic records," it is highly desirable that research with a view to such discovery should be made wherever practicable. The author recognises (p. 72) the importance of hlonipa as a possible agent in linguistic differentiation. Some points of detail might be contested, or, at best, seem open to an interpretation different from that given to them, but this does not affect the cordial welcome which must be extended to the volume.

A. WERNER.

Canada. Bradley.

Canada in the Twentieth Century. By A. G. Bradley. Popular edition, with 50 illustrations. London: Constable. Pp. xv + 428. 22×14 cm. Price 5s.

Canada is attracting so much attention at the present time owing to the marvellous progress the Dominion has made in every direction during the past few years, that Mr. A. G. Bradley's Canada in the Twentieth Century, of which a popular edition was not long since published, will well repay perusal. The author takes his reader across the entire continent from Quebec to Vancouver, halting by the way at various points of interest to give a brief sketch of the agricultural, commercial, and social condition of each state and town. His account of the various races which go to make up the heterogeneous population of Canada forms one of the most interesting portions of the book, and his picture of the French "habitant," who scarcely knows a word of English, and who staunchly keeps up his old national customs is true to the life. But is Mr. Bradley quite correct in stating that the "vernacular" is of Norman origin? We have been told by French-speaking Canadians that it is mainly of Breton extraction, at least in the vicinity of Quebec.

The other racial units are no less ably described: for instance, the old-fashioned Ontario farmer-settler, a figure of a century ago. Turning to the newer regions of Canada, the author devotes his attention to such up-to-date towns as Winnipeg, Calgary, Vancouver, etc. Especially valuable is his advice to young men who are thinking of going out to settle on the land. He plainly tells the would-be "tenderfoot" that the life is full of hardships, that success is only to be obtained by strict self-denial and hard work such as can scarcely be realised in England. Moreover, he strongly urges that the "gentleman emigrant" should be sent out young, if possible straight from school, and thinks any preliminary training in English farming worse than useless; "far better let him get his training in the country he is destined to do business in." There is very little doubt that much misconception exists on these points among English people, and that many lives and careers have been wrecked by the idea that the settler in Canada has only to scratch the ground to make his fortune. The fact, also, that so many black sheep of the family have been sent to the Dominion to work out their redemption and have hopelessly failed, has in a great measure set Canadian opinion against a certain class of young man immigrant, and has proved a serious hindrance to many earnest workers and desirable would-be colonists. The book is brightly written and is fully and appropriately illustrated. T. H. J.

#### ANTHROPOLOGICAL NOTES.

A NOTABLE pioneer and anthropologist has passed away in the person of Dr. A. W. Howitt, C.M.G., whose death followed close on that of his great collaborator, Dr. Lorimer Fison. As a pioneer Dr. Howitt was well known as the leader of the Burke-Wills Search Expedition in 1861, which resulted in the rescue of John King. As an anthropologist he was chiefly noted for his two works, Kamilaroi and Kurnai and The Natives of South-East Australia, but he also contributed papers to the transactions of learned societies, and many appeared in the Journal of the Royal Anthropological Institute, of which he had been an Honorary Fellow for some years.

THE death is announced on March 16th of Professor Gustav Oppert, the authority on Hebrew, Sanskrit, and Indian languages. Born in 1836, Professor Oppert in 1870 proceeded to England and first worked at the Bodleian Library, where he catalogued the Hebrew MS. collections. From 1872 to 1894 he held the Sanskrit chair at Madras University, and in 1895 accepted the Professorship of Indian Aryan and non-Aryan tongues at Berlin University. He had been a Fellow of the Royal Authropological Institute from its foundation, having joined the Ethnological Society in 1869.

Mr. J. F. Hewitt, late of the Bengal Civil Service, died on March 14th at the age of seventy-two. He was the author of The Ruling Races of Prehistoric Times in India and of The History and Chronology of the Myth-making Age.





Fig. 1.—GRAVE IN GROUP NEAR THE MERAMAC RIVER.

FIG. 2.- GRAVE XI.

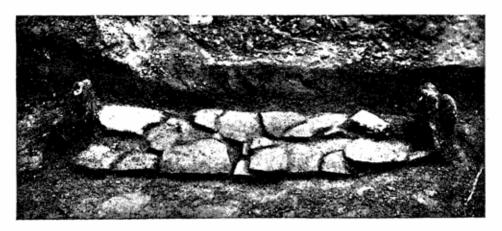


Fig. 3.—Grave XX, Showing Stones at Ends, Pottery-covered Bottom, and large block of Galena.

# ORIGINAL ARTICLES.

America, North.

With Plate E.

Bushnell.

Primitive Salt-making in the Mississippi Valley. 1907, 13.) By David I. Bushnell, Junr.

(See MAN, 3

In a former article (Man, 1907, 13) the writer described an ancient site, discovered in 1902 near the village of Kimmswick, Jefferson county, Missouri. But, on account of the limited space, it was only possible to refer briefly to the material found in the main excavation.

The object of the present paper is to show the difference existing between the pottery from near the spring in the lowland, and that found on the higher ground: also to refer to the groups of stone and pottery-lined graves on the same site.

A general plan is given in Fig. 4. That portion of the main excavation, which is represented in solid black, was shown in detail as Fig. 1 in the previous article.

The small excavation in the lowland near the spring extended about 25 feet from north to south, beginning at the foot of the bluff. It was carried down to the undisturbed clay, which was encountered at a depth of 4½ feet at the north end of the trench and 3½ feet at the south end. Resting upon the clay was a stratum, some 18 inches in thickness, composed of large fragments of earthen vessels, some freshwater shells and animal bones, intermixed with wood ashes, charred wood and mould, resembling the superstratum on the upper area, already described.

The sherds were parts of large shallow vessels or "pans" with rounded bottoms, which, if entire, would have measured from 20 to 30 inches or more in diameter. Covering this substratum was a mass of earth and sand which may be attributed partly to the alluvial deposits left by the creek during the season of high water and partly to the "wash" from the higher ground.

The large vessels, as well as the quantity of sherds found in the main excavation, were smooth on both sides, but all the fragments from the excavation near the spring showed on the outer surface the impression of woven or braided cloth of various degrees of coarseness. Not one example of "smooth" pottery was discovered in the lower excavation, although a few pieces were found on the present surface at the foot of the bluff, while others were scattered near a fire-bed, also near the foot of the bluff, but covered with a few inches of earth washed down from above. The finding of the two kinds of pottery in separate and distinct deposits and not intermixed, is evidence of two periods during which the site was occupied or visited. It is also evident that of the two the cloth-marked variety from near the spring is much the older. The flow of water from the spring is, at the present time, quite small, but probably during the days in which the cloth-marked pottery was made and used, and even subsequent to that time, it was somewhat greater, as the deposits of alluvial have covered pottery and spring alike, and much of its water may soak through and flow into the creek, without coming to the surface.

Theoretically the impression of cloth on the outer surfaces of the vessels resulted from the manner in which they were made. Probably a depression was first formed in the earth or sand the size and form of the desired vessel. The hollow was lined with cloth over which was then spread a thin layer of clay previously mixed with pulverised shell and sufficient water to make it of the proper consistency. When dry and taken from the mould the cloth would be removed, the impression of which, however, would remain on the exterior surface of the vessel.

As indicated on the general plan, three groups of graves were discovered on the site. The group on the slope towards the south-east and also that in the lowland near the creek, appear to have been quite extensive, but, as the surface above them has been cultivated for many years and as the graves were originally quite shallow, all have been

either badly damaged or destroyed by the plough. All, however, were evidently lined and covered with thin slabs of limestone.

Fortunately the third and most interesting group had never been disturbed, and all the graves, twenty-two in number, were examined. The relative position of this group is shown on the general plan (Fig. 4), while a detailed drawing is reproduced in Fig. 5. The group proved to be of unusual interest as the sides and bottoms of many of the graves were formed of fragments of large earthen vessels, which is quite unusual. The fragments so employed were parts of the smooth variety of salt pans, no cloth-marked sherds having been found; consequently the graves of this group should be attributed to the people by whom the salt pans, found in the main excavation, were made and used. In the following description "pottery bottoms" and "pottery sides" refer to the fragments of large vessels used in the construction of the graves:—

- Stone at head, pottery bottom. Contained two skulls and many bones. Length 4 feet 2 inches.
- II. Stones at ends, pottery sides and bottom. Contained traces of bones. Length 3 feet, width 1 foot, depth 11 inches.
- III. Stone sides and ends, pottery bottom, contained skeleton, resting on back, right leg crossing the left below knee. One small bowl on right side near head. Head N.W. Length 6 feet 4 inches, width 1 foot 6 inches. The bowl is shown in Fig. 6, half size.
- IV. Stone at head, also large stone covering the skull, bones scattered. Contained four small bowls, two on either side of skull, also chipped blade 5 inches in length under the skull.
- V. Stone sides and ends, two layers of pottery on bottom. Large stone covered south end, resting upon the side and end stones. Contained many bones upon which rested two skulls, face to face, between them, a shallow earthen dish. Length 2 feet 8 inches, width 1 foot 3 inches.
- VI. Pottery sides, ends and bottom. Contained traces of extended skeleton. Length 4 feet 6 inches.
- VII. Pottery sides, ends and bottom. Contained traces of extended skeleton. Length 4 feet 4 inches.
- VIII. Stone sides, ends and bottom. Contained four radii and four ulne, no other bones. Also eight finely worked bone implements, and a perforated disc of wood, discoloured by, and showing traces of, a thin sheet of copper, shown in Fig. 7, half size. Length 2 feet 6 inches, width 11 inches, depth about 1 foot.
- IX. Pottery sides, bottom and ends; one stone covered the entire grave. Contained one skull and many bones. Two small bowls between skull and end of grave. Length about 3 feet.
- X. End stones and two on north side remained; hillside washed away, exposing the stones. No bones.
- XI. Stone sides and ends. Contained two skeletons, one placed above the other, separated by a layer of slabs of limestone extending from the shoulders to the feet. The photograph (Fig. 2, Plate E) shows the upper skeleton exposed and also a part of the skull of the lower skeleton. Length 6 feet 3 inches, width 1 foot 9 inches, depth 1 foot 8 inches. Head west.
- XII. Stone ends, pottery bottom. Contained traces of small skeleton extended. Also two small bowls, one on either side of head. Length about 5 feet.
- XIII. Stone sides and ends. Contained traces of bones, apparently not an extended skeleton. Length about 5 feet.
- XIV. Pottery sides, ends and bottom. Was reduced in size (see plan). Contained scattered bones, upon which rested a skull at the north end and a small bowl at the south end.

XV. Pottery sides and ends. Contained small skeleton extended. Length 4 feet.
 XVI. Stone sides and ends. Contained two skulls and scattered bones. Length
 feet 5 inches, width 1 foot 4 inches.

XVII. Pottery top and bottom. Contained traces of bones. Also one earthen dish between skull and end of grave. Length about 4 feet.

XVIII. Pottery top and bottom. Contained traces of bones. Also one small bowl. Length about 4 feet.

XIX. Pottery bottom. Contained traces of a small skeleton, extended. Length about 4 feet.

XX. Stone ends, pottery bottom. No traces of bones. Contained a large rectangular piece of galena. Length about 3 feet 10 inches (Fig. 3, Plate E).

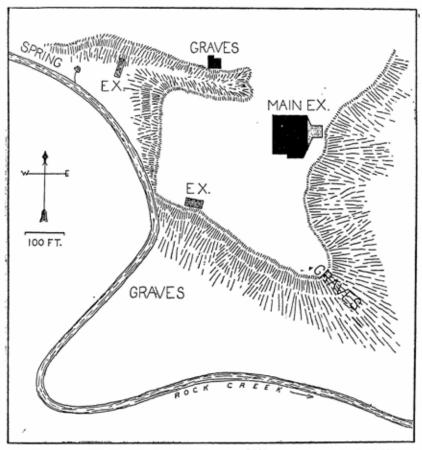


FIG. 4.—PLAN OF THE KIMMSWICK SITE, 1902, SHOWING EXCAVATIONS.

XXI. Stone ends, pottery bottom. Contained three skulls resting upon many bones. Length 3 feet 4 inches.

XXII. Pottery bottom. Contained traces of small skeleton, extended. Length about 4 feet.

The short graves usually contained the bones of one or more adults; the flesh, however, had evidently been removed before they were placed in the graves, this was not an uncommon custom among certain tribes.

The heads of all the graves in this group were placed between N. 5° W. and S. 80° W. (magnetic).

BOWLS

All the fragments of pottery found in the excavations and on the surface, and likewise the salt-pans, were composed of clay mixed with pulverised shell; but the small earthen bowls and dishes found in the graves were composed solely of clay,

neither pulverised shell nor sand being used as an admixture, nor do they appear to have been well baked. Evidently they were made especially to be placed in the graves.

The wooden disc and eight bone objects found in grave VIII may have belonged to a feather ornament of some sort. Slender strips of bone were often bound to the shaft XIX ΧV Ш VIII XL VI V POTTERY VI STONE

Fig. 5.—Group of graves north-west of main excavation, kimmswick site. EXCAVATED 1902.

of large feathers, and thin perforated discs of wood, similar to the specimen from the grave, were found by the writer in use among the Ojibways at Mille Lac, Minnesota, Two narrow strips of buckskin were attached to the end of the quill of an eagle's feather; the two strips then passed through the perforation in one of the discs and were tied to the head-band, thus the feather was free to fall in any direction.

The graves and all objects found on the upper area—including the salt-pans—were unquestionably made by the Shawnees, or rather a branch of that tribe. This may also be true of the cloth marked pottery from near the spring. The ancient home of the Shawnee tribe is thought by Dr. Cyrus Thomas to have been in central Tennessee, where the vast cemeteries of stone-lined graves are evidence that during past centuries that region was thickly peopled. Later, from the valley of the Tennessee they scattered towards the north and east, others went north-westward and up the right bank of the Mississippi nearly to the Missouri.

Cemeteries of stone-lined graves occur throughout the Shawnee country, and in

several localities fragments of large earthen pans have been found used in the place of stone in the construction of the graves. The tribe is also known to have been great salt-makers, and various places have been discovered where, in the vicinity of salt springs, large quantities of broken "pans" similar to those found at Kimmswick occur scattered over the surface. Consequently the Kimmswick site conforms in all respects with the known Shawnee sites, and as such it should be regarded.

Subsequent to the work on the Kimmswick site thirteen additional groups of stone-lined graves were discovered in the northern part of Jefferson county, and there are probably many more which



Fig. 6.—Pottery bowl from Grave III. (1)

have not been located. The majority of the groups did not include more than ten or twelve burials, and those which were opened contained traces of entire skeletons; that is, no "bundled burials" were encountered, although in some all evidence of the bones had disappeared.

A small group was discovered near the mouth of Dry Creek, which empties into Big River, in the western part of the county. They were in a slightly elevated mound which, although probably natural, had the appearance of having formerly been somewhat higher, as the surface had been cultivated for some years, and as a result of the ploughing many of the top, side, and end stones of the graves had been removed.

The first grave opened was 5 feet in length, and in it were found three chipped chert implements, one chert nodule, and a large marine shell — Sycotypus perversus. Four wisdom teeth were discovered in the shell, but no other human remains were in the grave. Beneath this grave, at a depth of about 4 feet below the surface, was another stone-lined grave or cist 4 feet in length and 1 foot 3 inches in width, which,

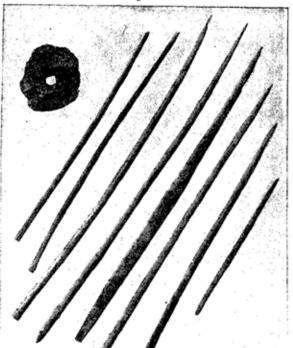


Fig. 7.—Wooden disc covered with copper, and eight bone objects: found in grave viii. (4)

however, contained no traces of bones. Five other graves were opened, in one a small pottery bowl was found, but no indications of bones remained in any one of them.

The most extensive group discovered during the exploration was some four miles north of the Kimmswick site, near the right bank of the Meramae River and about

three miles from the Mississippi. The largest grave opened is shown (Fig. 1, Plate E); the camera was pointing downward at an angle of 45 degrees. The head of the grave was towards the east. Evidently a rather extensive village once stood on the level area between the graves on the south and the Meramac on the north, as a great number of exceptionally well-chipped flint implements and quantities of broken pottery may be picked up on the surface, which unfortunately has been cultivated for many years. But the entire region is worthy of careful and systematic examination which would undoubtedly result in the finding of much valuable and interesting material.

D. I. BUSHNELL, JUNR.

Africa : Sûdan.

Thompson.

By R.

The Ancient Goldmines at Gebêt in the Eastern Súdan. Campbell Thompson, M.A., F.R.G.S.

While travelling, in 1906, from Sawakin towards Der-Aheb in the Red Sea province of the Sûdan, I passed through the mines at Gebêt, a distance of eight or



Fig. 1.—panorama of gebet kines.

nine days' camel journey. These were visited by Theodore Bent in his travels, but as many more of the old workings have been opened up since his visit, it may be worth while to describe them. I am indebted to the courtesy of Mr. Noel Griffin and his assistants on the modern workings for many pleasant recollections of the place.

Sawâkin itself is one of the few eastern towns in the Sûdan; the houses are frequently built with carved overhanging windows, such as are rarely to be seen in the more African towns south of the border line of Egypt, and the bazar is of the ordinary Egyptian type. I was able to buy in one of the shops about 500 small cornelian arrowheads strung as necklaces, which were said to come from Arabia. These were probably never used except as amulets.

From Sawakin our route lay by Port Sûdan, at that time only a collection of huts. When I returned six months later it had grown enormously, with stone buildings springing up, and the railway to Sawakin finished. The terrain is, of course, sand, which makes a belt of flat land between the sea and the great mountain ranges, which lie a day's journey from the coast, running parallel to the Red Sea. Our caravan worked up into these, passing through the sandy khors and wadies, which are full of thorn scrub-Khor Arbat is one of the most important, as it contains a stream of running water during the winter, which disappears in the sands long before it reaches the sea. Occasionally one may find snipe and some kind of duck here; rarely a green kingfisher and hoopoe; but there are many rock pigeons in the clefts of Jebel Hêrâno, and quantities of sand grouse come to water there. From here for thirty or forty miles up to the Dur-Erba plateau, a desert of two days' journey across, the country

consists of bare granite mountains, magnificent and impressive, with pathways winding over the sandy valleys between them. The main ranges are Erba, Oda, Gumadribab,† and Bawâti, and the hills cease abruptly at the edge of the Dur-Erba desert, which contains comparatively low knolls and spurs. Beyond this lies Gebêt, and here the high rugged



FIG. 2 .- WATER POOL AT ANCIENT MINES, GEBET.

hills begin again. The mines lie in a dip amid these hills, and the old workings are very extensive. The ground is honeycombed and burrowed with the tunnellings of the ancient miners, although the surface evidence would not lead to the supposition



FIG. 3 .- MODERN GOLD WORKINGS AT GEBÊT.

that they are so numerous as they are in reality. But underneath there is a great network of tunnels. some of which have been opened up by the modern company which was working there when I passed through, while others, although passable, are frequently half blocked by the fall of bits of the roof or walls. The tunnels all show traces of the marks of the

ancient picks or gads, which were undoubtedly of well-sharpened metal, and although no pick-head had actually been found, yet when the mines were recently opened up

I was told that a small iron scraper, shaped like a hoe, with a wooden handle about 10 inches long fastened into the socket, had been discovered in one of the workings. As an instance of the depth to which the old workings go, one of the old shafts, a rectangular cutting, goes down vertically 60 feet, and thence laterally by a gradually descending tunnel. There may be many other old shafts not yet opened up.

The finds in these mines, besides the iron tool mentioned above, consist of a few broken pottery lamps, a piece of basket, and one or two pieces of wood showing cutting marks of some sharp instrument. All the archæological evidence goes to show that they are not much more than 2,000 years old.

There were traces of stone-built huts, and in these ruins we found fragments of rough, burnt pottery, one crudely ornamented, a small piece of iron, and a bit of glass.

As in many other ancient mines the most noticeable relies of the former workers are the stone quartz grinders,\* both the upper and the lower mill stone, which lie scattered over the surface. Each stone was often as much as one man could lift. The method consisted in grinding the quartz in these hand-mills, the upper stone revolving in the lower and heavier upon the ore until the whole was crushed, and then the refuse quartz was sluiced away, the gold, of course, remaining at the bottom by reason of its own weight.

The local folk-lore is represented by a ghost story. The Ababdi natives who worked in the mines declared that one day several old men attacked them in the workings with stones to drive them away, these presumably being the ghosts of the ancient miners. But as long as the Sudani has a chance of seeing a ghost he will. One of our Sudani boys was left in charge of the camp by himself for a few days near some graves, and he was convinced that during our absence a ghost had arisen from one of them by night and wandered over to him.

By hearsay also I found that the Fuzzy-wuzzy round Arbat still sacrificed to the dead; that is to say, at a burial they slaughtered a kid at the grave. The graves are peculiar, as they have an encircling demarcation of stones, laid round them on the surface, with two or three flat stones stuck in the earth end-on, as a kind of door.

The sport is not very good, but ibex may be shot in the hills, and gazelles frequently in the wadies. The sand-grouse flies about in great flocks in the spring, and an occasional brace of partridges may be picked up. What is more, if the traveller hunger for fresh meat, doves are plentiful and very good eating when there is nothing but tinned meat in camp.

R. CAMPBELL THOMPSON.

#### America, North-West.

Nos. 36-37.]

Jetté.

On the Language of the Ten'a-II. (Continued from Man, 1907, 36.)

By the Rev. J. Jetté, S.J. Communicated by the Stonyhurst Anthropological

Bureau through the Secretary.

#### III .- EMPHASIZERS.

Emphasizers are agglutinant roots, or suffixes, which are added to words in order to make them an object of special attention. They may really emphasize or strongly accentuate the meaning, or merely point to the fact that the word is being used with a shade of limitation. Their use is not unlike our practice of italicising some words, when we wish to make the reader understand that they are used in some peculiar way. As they do not convey a precise and definite meaning, the rules for their use are necessarily broad, and leave considerable liberty to the speaker.

There are three emphasizers :--- x, yx, and rx.

## § 1. The Emphasizer a.

The a is not remarkably emphatic, but rather calls the hearer's attention to the fact that the word which it affects occurs in the sentence in some peculiar connection. It is added to nouns, verbs, and some particles (adverbs and prepositions). When agglutinated after a consonant it generally softens its sound from surd to sonant, as already described (Max, 1907, 36, p. 53); when after a vowel it is assimilated to it, presenting the phenomenon of reversed assimilation (ibid). Thus:—

rott, sled - - rotta midō, canoe - - mido'o taak, shirt - - taaga sasi, watch, clock - sasii dtet, mountain - dtela tu, water - - tuu

The emphasizer a is used after nouns—(1) in the vocative or address form, as:  $sak\bar{a}iha$ , boys, fellows, from sakaih; itaa, papa; inaa, mamma; kanaa, friend (upper dialect), from kana;  $dz\bar{i}na$ , friend (lower dialect), from  $dz\bar{i}n$ . Proper names, even of foreign origin, receive it as well as others, and the persons called, c.g., Telodzoih, Alexis, Mary Jane, will be addressed as:  $Telodz\bar{o}\bar{i}ha$ ,  $Alex\bar{i}a$ , Mary Jane-a. This use of emphasizer a with the vocatives is quite general, but is by no means obligatory. It can be compared to our use of the interjection O for the same purpose. The emphatic vocative in a should always be used when necessary to remove doubt or ambiguity; in other cases, at the option of the speaker. (2) To denote possession or dependence. In this case the a does not, as the English's, affect the name of the possessor, but that of the thing possessed; and, consequently, it occurs even when the possessor's name is represented by a pronoun. Thus: Paul rotta, Paul's sled; sc taaga, m shirt; Kayar rodtela, the Kayar mountains; m midoo, your canoe; sa kana ke sasii, m friend's watch; Sasia S

Exceptions to this rule are: (1) Abstract nouns, which never take the a; Paul yar, Paul's house; sa kayar, my village, my native place; sa kana tal'onkat, my friend's fish-trap, &c. (2) Nouns representing parts of the body or persons of kin, because they denote a relation much closer than mere possession, which is always implied in their meaning, and consequently no special form is required to mark this relation. With these the a is unnecessary, but it is left at the speaker's option to use it for the sake of euphony. Thus we say regularly: so-kŭn, my husband; so-'ot, my wife: nc-to, your father; nōn, your mother; me-tté, his head; mo-kŭt, his neck; &c. But we say, indifferently: so-kōn or so-kōna, my arm; se-tten or se-ttena, my leg; ne dzay or ne-dzaya, your heart; nu-ūr or nu-ūra, your elder brother; &c. The emphasizer a is much more strictly needed in the case of possessed uouns than with mere terms of address; and its omission with the former would generally render the sentence unintelligible.

The emphasizer a is used after verbs, in all the negative forms; and then, in the upper dialects, it is pronounced with a slight drawl. As in ke'son, I cat; keles'ona, I do not eat; lesdo, I stay; esdoa, I do not stay; nett'ān, I see; nett'āna, I do not see; taras'ot, I shall go; telaras'ola, I shall not go; &c. In current conversation, however, when the verb contains other marks of negation, the a may be omitted, as: te yar idoa, or te yar ido, he is not at home; too sudelinia, or too sudelini, you do not believe me, &c. A few verbs, generally transformed negatives which have acquired an affirmative meaning, present the a even in the affirmative, as: a-so-dega'ana, I despise, whose original meaning was, I do not care about; with these some speakers use a second a in the negative: a-so-dega'anaa, whilst others make the negative as the affirmative.

The emphasizer a is used after some adverbs and other particles, when these are taken absolutely, without further specification. Thus: yunotsĕna, yunāna, on the other side of the river, of the sea. But if any further specification is made, besides that expressed by the adverb, the a is omitted: yunōtsĕn se yar, my house across the river;

yunān na hayar, your native place beyond the sea. In particles ending with a vowel, the a is generally replaced by t: yunīt, up the river; yunī se yar, my house up the river; yudōt, down the river; yudō Kaltag, down the river at Kaltag. As the particles ending in tsen may drop the final n, they are capable of the same modification, and we have yunōtsēt, on the other side of the river, perfectly equivalent to yunōtsēna; se tootsēt or se tootsēna, behind me, &c.

In other cases the use of emphatic a with a particle seems to be almost exclusively a matter of euphony.

In the lower dialect the noun-forming suffix,  $\acute{e}$ , is often replaced by a; and there exists a special interrogative particle a or  $\lq a$ . Neither of these should be mistaken for the emphasizer a.

§ 2. The Emphasizer yä.

The yu is properly emphatic, although, as will soon be explained, it is also used as a pluralizer. When used as emphasizer it implies that much stress is laid on the word which it affects, and about corresponds to expressions like "indeed," "to be sure," "undoubtedly," &c. Thus: si-yu, I indeed; nezun-yu, assuredly it is good; narati'anyu, most certainly I saw it.

In the negative obligative of verbs, a tense used as prohibitive, the yu occurs together with the a, which it follows. The strong accent on the yu then absorbs altogether the slight one which accompanies the a, and it requires a practised ear to detect even the presence of the a. Thus:  $kenŭr\bar{u}'ih\check{a}y\check{u}$ ,  $rur\bar{u}ts\bar{e}'t\check{a}y\check{u}$ , do not steal, do not lie, are commonly heard as: kenuruihyu,  $ruruts\acute{e}tyu$ . The a is so slight in these forms that even the softening of the preceding consonant is omitted, and we say  $ruruts\acute{e}tayu$ , where we ought to have:  $ruruts\acute{e}dayu$ . The more correct speakers, however, soften the consonant when they pronounce slowly. But if the a which precedes the yu has been previously assimilated to a foregoing vowel, it preserves its distinct individual utterance, though very short: yet  $ne-r\bar{u}y\check{o}\check{o}y\check{u}$ , do not go there.

In the extreme upper dialect the negative of the obligative does not receive the emphasizer yu, but takes instead of it the adverb suu.

#### § 3. The Emphasizer ru.

The  $r\check{u}$  is properly a suffix denoting time or place, which accidentally serves the purpose of an emphasizer after a verb. When it occurs pleonastically, not being called for by the grammatical requirements of the sentence, it serves only to accentuate the word to which it is connected, and cannot be analysed but as an emphasis word. *E.g.*, in constructions like these: *Dzanyit rulan ru*, it being Sunday, to mean: "because it is Sunday," or "though it is Sunday"; *keintanru*, you having some, *i.e.*, although you have some (of the things you refuse to give me), &c.

In the lower dialect the suffix tsen is often used in the same way.

The emphasizers, although their vowel is short, are always accented, the accent being accompanied by a slight elevation in the voice. The yu is much more strongly accented than either of the other two.

J. JETTÉ.

England: Archæology.

Bullen.

Polished Stone Implements from Harlyn Bay. By the Rev. R. Ashington Bullen, F.L.S.

On December 17th, 1907, I exhibited at the Institute two specimens about the finding of which there can be no mistake. Colonel Bellers bought the site of the Prehistoric (late Celtic) burial ground from Mr. Mallett in 1906. Colonel Bellers' sister-in-law was searching in the bank at the west side on July 14th, 1906, and (though ignorant of the importance of her find) dug out, at a depth of about 15 feet from the top of the section, close to the site of the slate-built wall where the flattened skeletons (probably a foundation sacrifice) were found in 1900, a polished slate needle

(Fig. 1), and later a polished amulet, probably of serpentine, which bears a resemblance to the outline of a human eye, bevelled on both sides round the artificial hole (Fig. 2). The slate is of a close and even texture, and of a dark colour, foreign to the Trevose district, so far as workers in local building materials know.

The amulet is the first find of the sort, but the slate needle is the fifth polished stone implement from this district, one being in the Museum of the Victoria University, Owen's College, Manchester, three in the possession of the present writer, and one, now figured, belonging to Colonel Bellers, at Harlyn Bay Museum.

As I stated at the Royal Archæological Institute in July 1904, "no " one would rejoice more " than I if the whole dis-" trict were taken in hand

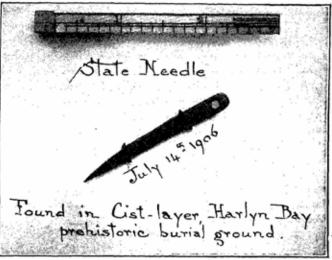


Fig. 1

"and scientifically explored:" in a year or two it will be built over and the chance lost. One thing is quite certain, the implements mentioned are of human workmanship; those that know the district and the site are convinced of their bona fides, and I will close this brief notice in the words of Dr. Haddon, F.R.S., in a letter, I believe, to the Royal Cornwall Gazette in April 1905:—

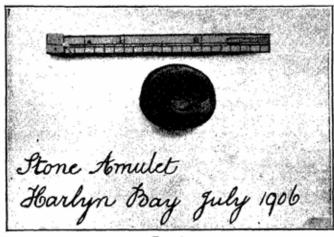


FIG. 2.

"The most important point in connection with this site is the occurrence of objects made of a closegrained black slate. Two perforated awl- or bodkinlike objects have been found which were brought to a fine point; another is a pointed object, which appears to have been definitely worked and may have served as a dagger; other pointed objects have been found which could be used for piercing holes in skins. Mr. Mallett . . .

has been wise enough to collect both likely and unlikely forms, as at present we are in the stage of amassing evidence; in a short time it will be possible to sift this evidence and to eliminate the artificial from the natural forms. These slate objects constitute a problem that archæologists have not yet seriously tackled. When these finds have been adequately studied, Harlyn Bay will probably become one of the 'classical' spots of British archæology."

R. ASHINGTON BULLEN.

#### REVIEWS.

Pacific. Krämer.

Hawaii, Ostmikronesien und Samoa. Meine zweite Südseereise (1897-99) zum Studium der Atolle und ihrer Bewohner. Von Professor Dr. Augustin Krämer, Marine-Oberstabsarzt. Mit 20 Tafeln, 86 Abbildingen und 50 Figuren. Stuttgart: Strecker und Schröder, 1906. Pp. xv + 585. 24 × 17 cm. Price 10 marks.

Dr. Krämer's first expedition to the South Seas was for the purpose of studying coral reefs and plankton, but he was not insensible to the attractions of ethnology: in this account of his second expedition ethnology takes a prominent place, and coral reefs find themselves relegated to an appendix.

His two-volume work, Die Samoa-Inseln (1902) gave an account of Samoa, where the greater part of his time was spent; this volume deals mainly with Hawaii, the Gilbert, Marshall, and Caroline groups.

The time devoted to the Marshall Islands was spent chiefly at Jaluit, of which a full description is given, together with an account of the geological formation, flora and fauna. Another chapter is given to the inhabitants, with notes on their language, the native dress (now nearly everywhere superseded by European costumes), ornaments, houses and canoes with methods of construction, food, manners, customs, and beliefs. An account is given of the seafaring ability of the natives, with examples of their charts, and a section is devoted to patterns of mat and tatu designs, with their native names and the songs sung during the operation of tatuing.

The tour through the Gilbert Islands was too brief to permit of intimate acquaintance with the natives, but it produced some interesting notes on personal appearance,
admirably supplemented by photographs, on ornaments, industries, etc., and Dr. Krämer
was successful in obtaining the meanings of some of the designs of the plaitwork mats,
and photographs of the peculiar cuirasses and shark's tooth weapons, and many
drawings of tatu patterns.

An interesting chapter is devoted to Nauru, an island between the Marshalls and Santa Cruz, which, on account of the gracious pleasing manners of the inhabitants, won, and still deserves, the name of Pleasant Isle. The island is occupied by twelve exogamous groups; mother-right prevails, the father obtaining no claim to his son except through divorce. The son, nevertheless, inherits from his father, the daughter from her mother, but if there are no daughters, the mother's goods (ornaments, mats, etc.) are destroyed. Often the firstborn inherit from their grandparents, whose own children are thereby portionless. A chief is succeeded by his grandson, hence a chief's daughter, who belongs to her mother's group, usually marries into that of her father. Both patrilocy and matrilocy are found, and polygyny and polyandry, in both cases the former being the more common. Faithfulness in marriage distinguishes the Nauru Islanders among their South Sea neighbours. Before the birth of a child the father wears a special belt, of which an illustration is given, as a token of chastity, and refrains from carrying heavy weights, from eating certain food, and from smoking strong tobacco.

The progress of civilisation is marked, as usual, by the vanishing of the picturesque, and nothing could illustrate the lamentable fact better than a comparison of the beautiful Ralik girl in native dress, who forms the frontispiece, with the group facing page 216, showing the chief Letakwa and his wife and daughter in "European costume." We feel that the author's comment is justified, "when I come to the question of women's "dress, I lose my temper."

The illustrations have the excellence which indicates that the author is also the photographer, only four out of the 106 being by other hands.

A. H. Q.

Pacific: Linguistics.

Macdonald.

The Oceanic Languages: their Grammatical Structure, Vocabulary, and Origin. By D. Macdonald, D.D., of the New Hebrides Mission, Member of the Société d'Ethnographie, Paris. London: Frowde, 1907. Pp. xv + 352. Two maps. 19 × 12 cm. Price 10s. 6d.

The author of this volume describes the habitat of the Oceanic languages as extending from Madagascar across the Indian Ocean to the Malay Archipelago, and thence through the Pacific to Easter Island. But though the title suggests a treatise on the Comparative Grammar and Vocabulary of this most widely spread of all linguistic families, the work is mainly a Grammar and Dictionary of only one Oceanic language—that of Efate in the New Hebrides. The comparative portions refer only to a very few other Oceanic languages, and are quoted only to illustrate certain features in the grammar of the Efate. Thus Indonesia is represented almost exclusively by Malagasy and Malay, and the remaining part of the region by a few languages of the New Hebrides (occasionally of other parts of Melanesia) and Polynesian. In spite, however, of this partial treatment of the languages the main purpose of the book is to set forth the proposition that the Oceanic languages are Semitic. The author says (p. 94) "that Arabia is the motherland of the primitive "Oceanic, as it is of the Ethiopic, Amharic, and Tigre, and of the Assyrian, " Phœnician, Hebrew, and Aramaic. . . . . The primitive Oceanic must be " regarded, not as a descendant of, but as a sister to the Arabic, Himyaritic, " Ethiopic, Assyrian, Phoenician, Hebrew, and Aramaic, and the Efate, Samoan, " Malagasy, Malay, etc., as cousins to the Mahri, Amharic, Tigre, Mandaitic, Modern " Syriac, and vulgar Arabic dialects." Referring to the speakers of these languages he states (p. 3) that "however the Caucasian, the Negro, or the Mongol physique " may be more in evidence in any particular part," they "constitute mentally, " socially, and religiously, as well as linguistically, one great though much diversified, " race or people, just as the languages, though multitudinously diversified, constitute " one great family." From this it may be inferred that he regards the collective Indonesian, Polynesian, and Melanesian peoples as a racial unit, a supposition which is not supported by reference to the known ethnological data. He further states (p. 5): "What the Phoenicians of Tyre and Sidon were later on in the Mediterranean " that their ancestors and cousins were then, and had been in earlier times, in the " southern seas of the Island-World. In the Arabian peninsula, running out into " those seas and contiguous to Africa, there was, in ancient times, a great com-" mercial empire." . . . "If we suppose that the Oceanic race originally, in " ancient times, migrated from that peninsular empire or from among that people, " along the east coast of Africa to Madagascar, and along the south coast of Asia " to the Malay Archipelago; this fully accounts for the negro element of blood in " the race as we now find it."

On the grounds that this negro element is older than the Mongol he rejects the Indo-Chinese peninsula as the place of origin. An Indian origin is rejected on the grounds that Indian civilisation was imposed on the Oceanic people (mainly in Java) in comparatively recent times.

Dr. Macdonald seeks to establish this theory of origin by a discussion of the Phonology, Word-building, Particles, and Pronouns of the Semitic compared with Efate and (partially) with other Oceanic languages.

The chapter on Phonology is not easy to follow. A table is inserted showing the transliteration of the Semitic alphabet into Roman characters with numerous diacritical marks, in which the number of the letter in the alphabet is given instead of the character, but the discussion does not make clear what sounds are represented. Thus the sixteenth letter of the Semitic alphabet (? y) is transliterated thus:

"16. ', related to ' and h." Here ' represents "1. a soft guttural breathing" (?  $\aleph$ ) and "8. h, a stronger h (?  $\tau$ ). The reader is left in doubt as to the meanings of d, h', t', ", s', t', which have to be sought in an Arabic grammar. Similarly g'(gw), k'(kw), h''(hw), k'(kw), are explained only as modified letters from the Ethiopic alphabet. The representation of Oceanic sounds is similarly confusing. The letter b stands for both b and p, f for f or v, w for u or w. The compound consonant (kpw) is written b. The Fiji c = th in "the," and the Aneityum d = th in "thin," are transcribed by the same character t', which is also used for an Arabic (?  $\aleph$ ), modification of 22. (?  $\Pi$ ). The Malagasy and New Hebrides tr is represented by t, described in the Semitic alphabet table as "a palatal t."

This chapter is illustrated by numerous examples of Oceanic words, which are said to have undergone various changes similar to the Semitic.

In the Semitic languages most of the roots consist of three consonants, and these—with certain definite exceptions—remain unchanged whatever may be the form of the word, much of the grammatical work being effected by inner vowel change and transposition of vowels and consonants. In a chapter on tri-literalism Dr. Macdonald attempts to show that this method applies to the Oceanic languages. He gives a table of thirty forms of the Arabic model verb fa'l (he did), the first six of which, he says, are the commonest forms in Oceanic.

He collects (p. 36) the following examples:-

Efate: lifai, to bend round, malibai, bent, lofa, a thing bent, lofa(i), to bend, malofa, kalofa, kolofa, bent, lufa, a wrapper round the loins.

Samoan: laralara, a wrapper round the loins, lofa, to crouch, lofata'ina, to cause to crouch, lare, larelare, to entangle, larelarea, to be entangled, larasi, to coil.

Fiji : lore, loret'a, to coil, fold, to bend, kalore, bent, salore, flexible.

Malay: lipat, lampit, lapit, lampis, lapis, a fold, to fold, plait.

Malagasy: lefița, lufița, folded, bent, plaited.

Arabic: lafelafa, to wrap round, etc., laffa, to be involved, intertwined, to wrap up, wrap round (oneself, as clothing), to fold, laff, liff, laffat, liffat, involved, intertwined, etc., loffa, loffat, coil of turban, winding of road.

The Oceanic forms are said to correspond to the Arabic forms in 1. fa'l, 2. fi'l, 3. fu'l, 4. fa'lat, 5. fi'lat, 6. fu'lat, thus:—

lare.
 lora, lore, lufa.
 lifa.
 lampit, lavasi.

lipat.
 loret'a.

The author says "The inference is irresistible that in the Oceanic primitive or mother tongue this word was triliteral, and had the vowel changes peculiar to the Semitic languages most fully preserved in the ancient Arabic; and that as a triliteral word with the middle radical doubled it underwent the usual contractions, set forth in all Semitic grammars, of such words as is plainly seen by comparing with the Arabic."

It will be noted here that the argument is fallacious. To find words with similar (not even proved identical) meanings it is necessary to range over the whole area of Oceanic speech, and yet these words are supposed to illustrate changes which occur in Semitic within the limits of a single language. Moreover, there is nothing in the Oceanic words to suggest an origin from three consonants, for the ta and si in Samoan, the t'a in Fiji, t and s in Malay, t in Malagasy, are not parts of the root, but are formative particles to be explained by comparison with other Oceanic languages.

In this chapter the author further discusses how "the ancient triliterals came "to be pronounced in the Oceanic dialects as they prevailingly are, as bisyllabic words "with the accent on the first syllable." He deals with various classes of triliterals, and gives examples of Efate words supposed to belong to each, with some Oceanic cognates and the Semitic words to which they are said to be related. I give four samples, taken at random, of these comparisons:—

Second radical doubled. Efate tabu, Arabic dabbu, prohibiting.

2. Middle radical w or y. Mota, esu, Polynesian, ora, ola, Malay, wrip, Java, idup, Efate, mairi,

Malagasy, reluna, Efate, mauri, moli, Fiji, bula, Tanna, murif, murep, life, to live. Arabic, 'as'a, to live, ēsa't, maīs'at, maīs'.

- 3. With weak or "fleeting" letter n as first radical. Efate, bisa or basa, to speak, Tagala, basa, Fiji, rosa, rosata ka, to speak about, Efate, visura ki, to converse, talk. Arabic, nabasa and nabasa, to speak, talk.
- 4. Three radicals strong. Efate, samat, samit, sumat, to beat, whip, chasten, hastening, being quick, Fiji, samuta, to beat, Malay, chamati, chamiti, a whip or scourge. Hebrew, s'amat, sa'mas, to smite, thrust, Arabic, samasa, to strike, to thrust, to urge on a beast violently, sumas, hastening, being quick.

All the correspondences here suggested are conjectural, and there is no evidence from Oceanic languages to support them. As regards: 1. No Oceanic words indicate that the b in tabu was ever doubled; 2. There is no evidence that esu = ola or urip; ma, m is a prefix, and there is no evidence from any Oceanic words that w was included in the root. 3. No forms of this word basa in Oceania give any indication of na in the root. In the dictionary visura ki is not found, but bisuraki is given as "to speak, lit. to speak for, about." Hence it is equivalent to the Fiji vei-sure, to ask to do, beg help for, and bi is Dr. Macdonald's "reflective verb performative," equivalent to the Fiji reciprocal prefix vei. Hence bisuraki has nothing to do with basa.

4. The root SMT is conjectural only: for ta, t does not belong to the Oceanic root, and chamati is a Tamil word borrowed in Malay.

In the next chapter Dr. Macdonald discusses the inflexional or word-forming additions, prefixes, infixes, and suffixes. The Oceanic forms are compared with Semitic, with considerable variation as to form and meaning. The author observes (p. 55) "that formative particles etymologically identical are not necessarily wholly " identical in use either in the Semitic or Oceanic dialects." This observation allows him to assert that the Malay (conditional) prefix bar is the same etymologically as Efate baka, which is the Fiji (causative) vaka, used in the sense of "having," and that the Malay barumah is thus equivalent to the Fiji vakavale.

The chapter on Pronouns and Particles is noteworthy for the unsupported statements made as to their origin in the Oceanic languages, as e.g.:-

- 1. The personal article i: Melanesian (not in Efate) ia, i, Malagasy i, is connected with the third personal pronoun (p. 75).
- 2. The loss in the Oceanic dialects of the distinction of gender in the second and third
- 3. The third personal pronoun, the ancient plural of which is now used in the Oceanic dialects, also for the singular (p. 75).

4. The Oceanic mother-tongue formed the plurals of the second and third personal pronouns

by the ending -m, and the dual by the ending -a (p. 76).

- 5. Traces of the ancient feminine ending -t are still retained in the word for "female," also in sikai, "one" and lai, "woman" . . . this ending of forming abstract nouns throughout the Oceanic (p. 91).
- 6. The aucient terminations in Arabic, -w, -a, -i, nominative, accusative, genitive, are now used in Efate, as in Hebrew, etc., without case signification (p. 91).
  - Nunation is frequent in Malay and Malagasy (p. 92).

The second and larger part of the volume is "a complete dictionary comparative, " and etymological" of the language of Efate. In this the words are compared with a few Oceanic, but more extensively with Semitic. The following two extracts will show the author's method :-

Banako, v. t., dd. binako, bunak, to steal, banakò sa, and banak ia, d. bunako n', steal it. [Maori, whanako, whenako, Fiji, butako, Eromangan, prok, Malekula, fenake, Malay, cholog, Java, nolog, Malagasy, halata, c. pref. magalata, id.] Arabic saraka. n.a. sark', Mahri, heriq, heliq, and desoq, to steal.

Niu, s., c. art. naniu. the cocoanut palm. [Fiji, niu, Eromangan, nohi, Aneityum, neaig, Malay, nior, Ceram, niula, Malekula, hula, Malagasy, nihu, Samoan, niu, id.; niu piu, fan palm (therefore niu is a general name for a palm); niui, to sprinkle with the juice of the cocoanut, Hawaiian niu, to whirl about] Arabic, nah'lu, palm (gen. name), nah'ilu (coll. name), nah'ala, to sift, to pour out or sprinkle (snow, as the clouds), Newman's Dict. of Modern Arabic, 7. to drizzle.

The work is concluded by an index of Semitic words in their native character, Hebrew, Arabic, Ethiopic, and Syriac. It is well and clearly printed at the expense of the Government of the Commonwealth of Australia.

One cannot help admiring the enormous trouble and research which the author has expended in working out the comparisons made in his book, but it is very doubtful whether his conclusions will be regarded as satisfactory by either Oceanic or Semitic students. The demonstration of similarities between Efate, one member of the Oceanic language family, and the Semitic languages taken collectively, will not be accepted as evidence that the whole body of Oceanic tongues are Semitic. The comparative grammar of the Oceanic languages, so far as it has been worked out, shows no evidence of word formation from triliteral consonantal roots, even in the languages which are nearest geographically to the Semitic region. Anthropologists will probably find the summary of Efate Sociology (in the introduction) the most useful part of the volume.

Melanesia. Hardy: Elkington.

The Savage South Seas. Painted by Norman H. Hardy, described by E. Way Elkington. London: A. and C. Black, 1907. Pp. xii + 211; 23 × 17 cm. Price 20s.

The first coloured illustrations of the South Sea Islands make one long for more. Mr. Norman Hardy is one of those who is content to draw things as he finds them and not to startle his readers by presenting a collection of the monstrous and the grotesque as types of the races among whom he travelled, and as the scenery and the people of the South Seas are rich in beauty and colour he has lost nothing by being faithful to Nature. His sketches cover the Motu tribes of New Guinea, the Solomons, and the New Hebrides, and whether it is the landscape, or the sea, or crowded groups of figures, his brush and his eye for composition are almost faultless. If his sketches have lost anything in the process of reproduction it cannot be discerned even by one who has covered much of the same ground. He has even succeeded in investing the trader's life with picturesque colour without concealing its squalor.

Where all are so good and so delicately handled—which means much to those who know the difficulty of painting a tropical atmosphere without harshness—it is difficult to single any out for special praise, but for beauty of composition the pictures of fish-spearing and of the forest at Simbo, and for anthropological interest those of a Kaivakuku in New Guinea and of the drum grove in the New Hebrides deserve special mention.

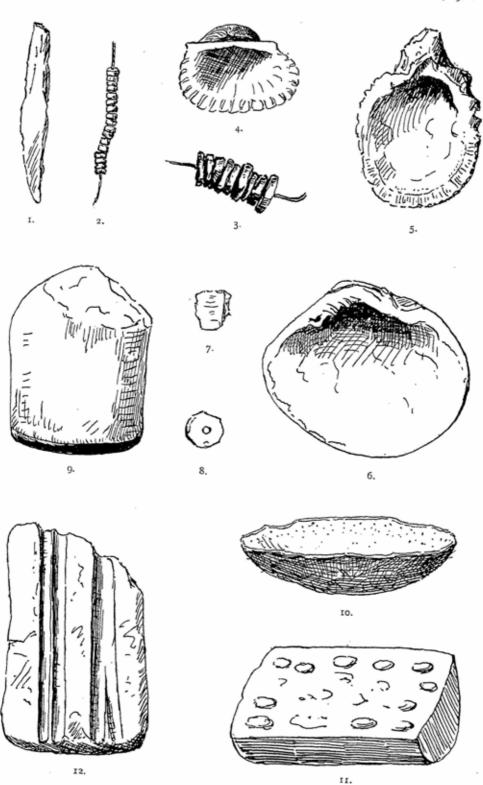
In such a book, where it is intended that the letterpress should be subordinate to the pictures, it would not be fair to be hypercritical. Mr. Elkington did not aim at more than writing a colloquial commentary on the pictures, and as he has no ethnological tastes and little historical knowledge of his subject the result is rather disappointing. His spelling of the native names—such as Tupusuli for Tupuselei, and Samari for Samarai, Guadalcana for Guadalcanar—should have been revised by some one better acquainted with the country.

B. T.

#### ANTHROPOLOGICAL NOTE.

MR. J. P. Johnson, A.I.M.M., of Johannesburg, has been commissioned by the Government of Orange River Colony to investigate and report on the Bushmen sculptures and paintings in that territory. Mr. Johnson is a member of the commission appointed by the Transvaal Government last year to make a similar report on the etchings and paintings which exist in that colony.





THE MANUFACTURE OF MALAITA BEAD MONEY.

### ORIGINAL ARTICLES.

Solomon Islands.

With Plate F.

Woodford

Notes on the Manufacture of the Malaita Shell Bead Money of the Solomon Group. By C. M. Woodford.

At various places off the coast of Malaita a series of small inhabited islets have been built up upon the fringing reef. These singular reef-islet villages occur at Alite, Langalanga, and Auki, on the west coast; at Sio Harbour, at the extreme north-western end of the island; and at Funafou, Urassi, Sulafou, Atta, Beresombua, Kwai, Nongasila, and Uru, on the east coast.

The islets appear to have had their origin in raised patches of coral upon the reef flats, which have been laboriously added to and gradually built up by their inhabitants until a solid foundation, well raised above the water, was produced. They are undoubtedly of very ancient origin. The islets are faced with a wall of coral stones about six to eight feet high, with here and there an opening like an embrasure with a sloping beach for the admission of the canoes.

They vary from as little as under a quarter of an acre to two or three acres in extent, and are densely peopled by a seafaring population, who speak a different dialect from the bush natives of the mainland.

The inhabitants of these islets get their living by fishing. The fish they sell to the natives of the mainland, in exchange for vegetables, pigs, and articles of native manufacture, at certain recognised market-places on the beach, to which they resort in their canoes almost every day at times arranged beforehand with the natives of the bush.

The actual bartering is done by the women, who advance one towards another, the island woman with a fish, and the bush woman with yams or taro, while the men stand on guard on either side with spears or rifles.

Sometimes it is not even safe for the two parties to approach one another, and in that case a small cause is veered ashore with a line, the articles for exchange being placed in it.

I am informed that disputes at these markets are rare, but at other times the island natives cannot venture ashore upon the mainland without risk.

Having no canoes, the bush natives cannot visit the reef islets, and the islanders probably take good care that they shall keep none.

The reef islanders, on the other hand, are accustomed from their earliest years to be constantly afloat, and become expert in the management of the merest shell of wood. I remember, during my first visit to Auki in 1886, counting no less than ninety-five canoes round the ship at one time, from the crazy thing hardly larger than a butcher's tray, skilfully managed by a child of six, to the more perfect article large enough to carry three or four men. They have, of course, larger canoes capable of carrying twenty or thirty men, but these are only used for long voyages.

Even upon such a small island as Auki two factions exist. The island, which may be perhaps two acres in extent, is of reniform shape, and, probably, was originally two islets. The western part of it is known as Auki, and the eastern part as Lisiala. There is a strip of neutral ground in the centre separating the two settlements, divided on either side by walls of coral stone six feet in height. The population of this islet, I was told, and I can well believe it, amounted in 1896 to 500.

The houses, or rather hovels, for they are nothing else, are crowded so closely together that there is hardly room to pass between them, and the ground set apart for the burial of the dead still further curtails the space available for habitation.

It is at Auki, Langalanga and Alite that the manufacture of shell money is carried on, and the quantity produced during a year must amount to many hundreds of fathoms.

I have elsewhere spoken of the state of existence upon these small reef islets as probably presenting some resemblance to the condition of the ancient lake-dwellers of Europe, but perhaps a comparison with the first beginnings of Venice would be juster, and it is a curious and possibly significant fact that Venice is to this day celebrated for its manufacture of glass and coral beads, doubtless the survival of a primitive industry, the finished result of which, probably, somewhat resembled the shell bead money of the Solomous.

The shell bead money of Malaita is of three colours—white, red, and black. It is generally known as *Rongo*. The white money is called *Rongo pura* and the red money *Rongo sisi*. The black is not made up in strings by itself, but a few beads of it are introduced here and there in the red and white money, either for contrast or to mark the length.

The shell from which the white money is made is the Arca granosa (Pl. F, 4), native name on Malaita, Kakandu; the red is made from the shell Chama pacifica, native name Romu (Pl. F, 5); the black is made from the shell of the large black mussel or pinna, native name Kurila.

These shells, especially the red ones, are articles of trade among the natives of Malaita and are bought by the basketful by the money-makers from distant parts of

Malaita, and even from other islands.

The shells are first broken into irregular fragments rather smaller than a threepenny piece. In this condition they are called fulo-mbato (Pl. F, 7). For breaking the shells a stone hammerhead without a handle is used called fau-ui (Pl. F, 9). The stone anvil upon which the shells are broken is also called fau-ui, or fauli-ui.

The broken pieces are then chipped into the form of a roughly circular disc, in diameter about as large as a pea. They are then placed upon the flat surface of a piece of soft wood of semi-circular section (Pl. F, 11). This instrument is called ma-ai. Upon its flat surface are a number of shallow countersunk holes in which the fragments of shell are placed. These are ground flat and smooth, first on one side and then on the other, upon a flat rectangular stone.



FIG. 1.—METHOD OF SHARPENING FLINT DRILL USED IN MAKING SHELL MONEY OF MALAITA.

called fou-sava. This grinding stone is of a particular kind, and the Auki people purchase it from the bush natives at the market place at Fiu, near Auki. It appears to be highly valued, as I was unable to obtain a specimen, but I have since obtained fragments.

The broken pieces of shell, now ground flat on each side and reduced to the requisite thickness, are placed one at a time into the half of a coco-nut shell, called teo-le-futa (Pl. F, 10), and a hole is drilled through the centre by means of a pump drill, futa. This drill is tipped with a piece of flint or chalcedony, called landi (Pl. F, 1). The stone of which these drills are made is also purchased from the Malaita bushmen.

The fly-wheel of the drill is a disc of turtle bone and is called taka. The pump handle is called randi and the spindle futa.

The flint points are sharpened by means of the large freshwater mussel or cockle shell, native name  $k\acute{e}e$  (Pl. F, 6). The flint is held down upon a piece of wood with the left hand and small flakes are pressed off it by the edge of the shell, held in the right hand, until the requisite degree of pointedness has been attained (Fig. 1, text).

After boring, the pieces of shell (Pl. F, 8) are threaded on a string, made of a strong bush fibre called *lili*, in lengths of about four or five feet. From their previous grinding on both sides, the shells, or as they may now be termed, beads, lie closely together along the string, but their edges are still irregular.

The next process is to remove the rough edges and to reduce the beads to the proper size. To effect this the strings of rough beads are fastened upon a flat piece of board called *mbambaliara*, and rubbed lengthwise with a grooved stone (fouliara, Pl. F, 12) and sand (ole) and water until the requisite size and smoothness have been attained.

The beads are now finished and ready for the final stringing. The finished beads are called bata.

A fathom of white money is called *forososo*, in the language of Malaita, where it is made; in the language of Gela and Guadalcanar, where much of it is taken for sale, *turumbuto*.

The red money is put up in two ways: first in strings of about five feet or a fathom long. Ten such strings are called in the language of Malaita tavuli-ei or apuala avu, and in the language of Gela, baru. The other way of stringing is in lengths of about ten feet or two fathoms with a patch of black or white money in the centre. One such string is called vinda. Two strings joined at each end and in the centre are called kongana; three strings, sautolu; four strings, matambala or sauvati; five strings, rapakava; six strings, talina. A proper talina consists of six strings, although sometimes five strings only are called by this name. An isa is ten strings of red money.

One talina, one hundred randi (porpoise teeth), and four turumbuto are also equivalent to an isa.

There is yet another kind of red money, more precious than the ordinary red, on account of its intense colour. It is made from fragments selected from the most highly coloured part of the *romu* shell, and from selected shells only. A single shell may perhaps supply one bead of the requisite colour.

It is said that two years are required to make a piece of this very red money measuring in length from the hollow of the elbow joint to the end of the middle finger. It is known in the language of Malaita as ferai, and in the language of Gela as baru nekasa.

Another kind of black money, other than the kurila, above referred to, is made from a vegetable seed called fulu. The tree upon which it grows is called sisis.

I have obtained a small sample of another kind of shell money from Malaita (Pl. F, 2), which differs considerably from the shell money made on the islands described above. It is made in small quantities by the bush natives living inland from Kwa, between Onepusu and Bina. I am informed that only one quality is made. The colour is pinkish-white, and the beads are much smaller than those of the ordinary Malaita money. It is called mamalakwai. A small piece, measured from the hollow of the elbow to the end of the middle finger, is called lo-suu.

One fathom is called baniou; two fathoms are called rua mamalakwai.

Bead Money from Guadalcanar.—There is a very scarce kind of bead-money from Guadalcanar (Pl. F, 3), which used to be made by the bush natives inhabiting the centre of the island in the neighbourhood of Tatuve.

It is not now made, and the old bush chief, Sulakava, from whom I obtained my specimens, could not tell me what the material was. It consists of coarse, black,

irregularly sized discs, but whether it is made of shell, or the shell of a nut, or of some kind of mineral, my informant was unable to say, and after examination I am equally at a loss to determine. Half a fathom of it is called *Kurina*; one fathom is called *Paku*.

C. M. WOODFORD.

Africa, West. Punch.

Further Note on the Relation of the Bronze Heads to the

Carved Tusks, Benin City. By C. Punch.

In Man, 1908, 2, appeared an article on the relation of the bronze heads of Benin to the carved tusks from that city, together with a photograph of two of the heads. There is also a reference to a photograph taken by myself which appeared in Ling Roth's book, Great Benin. As there appears to be a doubt in some minds as to whether the heads, such as illustrated in Man, 1908, 2, formed the support for

carved tusks, perhaps the testimony of an eye-witness may be worthy of record.



I myself took the photograph herewith reproduced, and the tusks were at that time standing on top of the heads, and not, as has been suggested, behind them. I can guarantee that the altar was exactly as it appears and that the negative has undergone no retouching. I cannot remember whether there were any wooden spikes fixed in the holes in the crowns of the heads which supported the tusks, but if there were the white ants would soon have made short work of them. The carved tusks were of all sizes, from "scrivelloes" of 4 or 5 lbs. to large ones of 60 to 70 lbs. Of course all tusks were not necessarily supported on heads, nor, at the time of my visit, did all heads support tusks. I believe that originally all the heads were intended for this purpose, but that the state and ceremony which must have prevailed in Benin in early times had sadly declined. The compounds in which stood the juju altars were neglected, cattle wandered about and displaced the objects on them. New altars were made as each king died, and the older ones fell into decay.

CYRIL PUNCH.

Obituary: Howitt.

Lang.

# Alfred William Howitt, C.M.G., Sc.D.; born 1830, died March 7th, 1908. By A. Lang.

Though Dr. Howitt had done a long life's work in the cause of the knowledge of human nature, the news of his death brings deep personal regret to all who were acquainted with the results of his labours, animated by that liking for the tribesmen of Australia which personal knowledge of them always awakens in liberal and gentle minds. He knew them intimately, and studied them closely, for more than thirty years. As the tribes with whom he had been familiar died out beneath the kindness no less than the cruelty of the whites-died of European clothing, of whisky, of opium, and beneath the rifle, Dr. Howitt sought information from scores of correspondents, dwelling in regions where the blacks had not yet been extirpated. Much patience, much sagacity, were demanded in the task of collecting and sifting the notes received from correspondents, who were all obliging and anxious to be accurate, but who were not all acquainted with the languages of the tribes, were not all trained to scientific observation. It could not be but that, in describing the highly complex rules which govern native marriages, mistakes must occur, be discovered, and cause a repetition of the processes of inquiry. Dr. Howitt's patience, his eagerness to verify his facts, and to withdraw whatever he had reason to suspect as incorrect statements, are universally and gratefully recognised.

After making an expedition into Central Australia fifty years ago, Dr. Howitt, in 1860, prospected in Gipp's land. In 1864 he was prominent in the search for Burke and Wills. It was apparently about 1873 that he became the ally and friend of the Rev. Lorimer Fison, who was examining savage systems of relationship in the light of the ideas of Mr. Lewis Morgan. That student was rather actively industrious than conspicuously logical. He was, however, with J. F. McLennan, a pioneer into the darkling region of early social life. Unhappily, the pioneers fell out Mr. McLennau was a man of the keenest wit: but his health was by the way. inadequate to his energy. The sword wore out the sheath. He could never see in savage terms for human relationships more than a system of addresses, and the researches of Dr. Howitt and of Messrs. Spencer and Gillen prove to demonstration that he was wrong. I cannot say that Morgan's belief in an effort towards moral reform as the first source of the earliest marriage rule (if the earliest it be)-the division of the tribe into a pair of exogamous intermarrying phratries-seems better inspired than McLennan's explanation of terms of relationship. Both men were pioneers, and the wonder is that they both did so much towards clearing and occupying new ground.

Dr. Howitt was among the contributors to a book of varying values, Mr. Brough Smyth's collection of reports on the aboriginals of Victoria.

In 1880 he and Mr. Fison collaborated in the well-known book, Kamilaroi and Kurnai, which marks a great advance in our knowledge of Australian society. I have had the curiosity to look back on my own review of it in the Saturday Review, 1881. I found myself "unable to agree with Mr. Fison on many points, but obliged to "thank him for a spirited, if unsuccessful, attempt to elucidate the marriage customs of the Australian black fellows." Then I tackled Morgan, charging heavily against his logic: I traced the varying results of the Rev. Mr. Ridley—the early information about "classes" was mixed and imperfect—and I insisted on knowing what totems had to do with exogamy. We still want to know! "How is the origin of totemism to be explained?" I asked, and especially asked, if the phratries be the result of a law of moral reform, why were they, as Mr. Fison seemed to suppose, totemistic; or rather, distinguished by totems?

In the whole review, space being limited, nothing was said of Mr. Howitt's information about the Kurnai. By the natives of that tribe he was later accepted as an initiate, studied their initiatory ceremonies, and discovered the belief in the "All-Father." The belief was no novelty to science. Waitz, fifty years ago, accepted it as genuine, and as original, not due to Christian influences. Nevertheless, a recent French reviewer of Mr. Howitt's Native Tribes of South-East Australia insisted that the more interesting parts of the faith are European contaminations, without referring to Mr. Howitt's proofs that this could not be the case. In Kamilaroi and Kurnai, Mr. Howitt, not yet initiated, knew only of Brewin, a being who is not on a level with the Kurnai All-Father.

The Kurnai rites, the Jeraeil, were described by Dr. Howitt in Journ. Anthr. Inst., 1885, and, with Mr. Fison, he contributed an interesting paper on the Attic Deme and the "Horde." Here the authors said that class names (by which they probably meant phratry names) "probably all are totems"—that is, probably phratries (or matrimonial classes?), are named after animals, plants, and other objects in nature. Certainly there are several such cases, but the prevalent ignorance of the tribal languages prevents us from attaining any general conclusion. As to Attica, the authors concluded that "there seems to be no doubt whatever that the totem did "exist there." This is scarcely demonstrated.

In 1881, the article (Journ. Anthr. Inst.) on the change from descent in the female to descent in the male line did not greatly advance our knowledge of the causes of the change. Later, Dr. Howitt found that among the Dieri, one of the most primitive of tribes in his opinion, fathers have a way of presenting, as it were, their own totems (in addition to the inherited mother's totem) to their children. By this method the change to "father right" might be evolved. As each Dieri father's wife has several pirrauru who need not be of the father's totem, and who may be the fathers of the "father's" children, the confidence of the father is rather singular! It shows a good heart.

There are other papers, with one on Australian beliefs, in *Journ. Anthr. Inst.* (1884), all of which Dr. Howitt regarded as superseded by his great work of 1904, *Native Tribes of South-East Australia*. As literature, some of the earlier papers, particularly that on the discreditably neglected theme of native poetry, were, to my taste, more interesting.

Of the Native Tribes it is superfluous to speak. It is one of the classics of Anthropology. Many points of controversy remain undecided; perhaps they never will be decided. Some people will believe that a reformatory movement caused a bisection of each tribe into two exogamous intermarrying phratries. Others will ask, "What was there to reform; or how could the tribe see that there was anything to "reform? Why were totem names given to the phratries, and what is the origin "of totemism?" Dr. Howitt advanced no theory. He touched but slightly on the problem of one totem to one totem marriage, a problem obviously crucial, and he did not apparently understand, in the field of religion and magic, the importance of what he tells us about Kutchi among the Dieri.

His book is so rich in facts that we have not yet even detected all the problems which it presents. But for him, the nature of life in the dying south-east tribes would have been as obscure as that of the extinct Tasmanians. He has had worthy followers, but no man so long and so strenuously, with so much caution and so sagaciously, has studied a savage people. Respect for his work and his memory urges research, if there yet be time, among the little-known tribes between the Dieri and the Barkinji as well as among the Western Australian peoples.

A. LANG.

Physical Anthropology: Pigmentation.

Dubois.

On the Correlation of the Black and the Orange-Coloured Pigments, and its Bearing upon the Interpretation of Redhairedness. By Professor Dr. Eug. Dubois.

The important results concerning the colour of the hair, obtained by Mr. J. Gray by means of his new form of Lovibond's tintometer, and communicated at the meeting of the Royal Anthropological Institute of February 11th, 1908, give me occasion to present the following remarks on the same subject, one to which considerable attention is just now being given everywhere.

As I take it, from the report in Nature of February 27th, Mr. Gray proved that the hair contained two coloured pigments, an orange and a black pigment, the black pigment increasing uniformly in amount from blonde to black, the orange pigment remaining practically constant in that series of hair. In the series of red hair, on the contrary, the orange pigment is predominant, its increasing amount causing the colouration from light to dark red. Finally, the conclusion was formulated that red hair was derived from dark hair by the conversion of more or less of the black pigment into an equal amount of orange pigment.

I arrived at a quite similar conclusion in a small paper published in the Nederlandsch Tijdschrift voor Geneeskunde of February 8th, 1908 (pp. 463-466), taking chiefly into consideration certain facts of the hair colours in mammals. These facts, indeed, seem to me to be decisive as to the interpretation of the pyrrhotism.\* Some of them may be mentioned here.

Mammals in the state of domestication, such as cows, horses, dogs, exhibit grosso modo all kinds of hair colours, in the gradual transitions which we meet in man. A melanochrome and a pyrrhochrome pigment, more or less mixed with one another or more or less pure and in different degrees of concentration or saturation, suffice to explain them all.

The colours of mammals in the wild state are generally, in every species, in a more constant condition of mixture and saturation. Thus many species are jet black, others are fiery red. Evidently black and red (properly orange) are the fundamental colours of the hair.

But very strikingly, too, there comes to light the intimate relation between the pyrrhochrome and the melanochrome pigment. The facts, indeed, force upon us the idea that the orange is an easily produced (chemical) modification of the black pigment. A few of these facts may be mentioned here in proof of it.

Of the wild Javanese cow, the banteng (Bibos sondaicus), the young bulls, which are brownish-red over the largest part of the body (as the females are for their entire life), become jet black in the adult state. As mentioned by Darwin (Descent of Man, Vol. II., p. 289), the emasculated bull reverts to the colour of the females.

Likewise the young of both sexes and the adult females of *Pithecia leucocephala* are brownish-black above and red on the belly. The adult male is black above and beneath.

Again, in Mycetes caraya, the hair of the adult male is entirely of a deep black; the adult female and the young of both sexes are greyish-yellow.

In Lemur macaco, too, the male is black, the female red.

The colour of the hair may, further, vary extensively in one and the same species. Thus different individuals of the common European squirrel, of the same region, present all gradations from orange to the darkest brown, and finally black. In the Netherlands I obtained only partially black specimens, but entirely black ones have frequently been met in Germany, and, in one and the same litter, black young side by side with red young.

<sup>. \*</sup> From pyrrhos == foxy-red, fiery-red, orange, a more adequate term for the colour in question than erythros or rutilus.

In the dunes of Holland I frequently met entirely black wild rabbits, but on two occasions, and in quite different places, I observed a foxy-red individual.

It is well known that the hair of the orang-utan may be of a lighter or darker brownish-red, and in some cases nearly black. The chimpanzee, commonly jet black, may become ruddy-brown in some individuals. In *Lemur varius* we meet with red and black chequered individuals.

Of Hylobates lar and H. agilis some individuals may be rusty brown and even light yellowish (especially females), while others are jet black. In the last case the young are often dark brown.

In the middle and west part of Java, I observed, in some very rare cases, amongst one of the very frequent troops of entirely black budeng (Semnopithecus maurus) a single red (orange) individual. In early life all the young are light red. In the eastern part of the island some of these red monkeys, as described by Dr. Kohlbrugge, are nearly constantly mixed in the troops of the black species. Though formerly described as a different species, Semnopithecus pyrrhus, in the opinion of Schlegel and Kohlbrugge, it should be regarded only as a kind of albino of the black species. I am inclined to consider the former to be a new form, by mutation.

On the contrary, in some individuals of the leopard in Java and India, the yellow and red hair of the skin varies into black. Yellow and black cubs belong to one and the same litter.

The black fox is of the same species with the common red fox.

The hamster (*Cricetus frumentarius*), commonly rusty coloured above and black on the belly, in some parts of Germany exhibits a black back.

Finally, it is well known that of nearly-related species often one has black, the other red hair. Thus, for instance, the black Semnopithecus maurus of Java and the orange Semnopithecus ferrugineus of Sumatra, the jet black Hylobates syndactylus and the reddish or yellowish individuals of the other Sumatran gibbons, the black chimpanzee and the red orang-utan.

The black fox, the black leopard, the black rabbit, the black hamster, and the black squirrel are cases of melanism. But the red rabbit, the red budeng, and the red chimpanzee may be termed cases of pyrrhotism.

We may consider the last-named phenomenon as depending upon a modification of the melanochrome pigment into pyrrhochrome pigment. In a similar way we consider albinism to depend upon the reduction to a minimum of the black and the orange colour, the corresponding pigments probably undergoing a modification into a white substance, and we consider melanism to depend upon an increase of melanochromepigment (in many cases originating from modification of the pyrrhochrome pigment).

Just as in mammals in the state of domestication, in man pyrrhotism is a very common phenomenon. Here also we have to put it in the same rank with the phenomena of melanism and albinism.

Indeed, pyrrhotism occurs frequently in all races, not less so than albinism. Pyrrhotism, too, is not limited to the hair, for in red-haired individuals the skin commonly is of a very peculiar, delicate complexion and abundantly freckled, the freckles characteristically called taches de rousseur by the French. This peculiar condition of the skin, evidently depending upon deviating trophical processes of the integument, may be present in brothers and sisters or children of red-haired individuals, but not be accompanied by red hair.

Also the experiments of Tornier,\* showing that full-grown Pelobates fuscus could be obtained differently coloured, melanotic, pyrrhotic, or albinotic, by supplying

<sup>\*</sup> Zoologischer Anzeiger. Inseraten Beilage, October 29, 1907. Vol. 32, No. 9-10, pp. 248-288.

different amounts of food to those frogs in the larval state, tend to prove the intimate connection of modification of the integumental pigments with trophical processes.

To summarise: all these facts and many others force upon us the opinion that we must consider pyrrhotism as depending upon an easily occurring (chemical) modification of the melanochrome into pyrrhochrome pigment, while on the contrary they are incompatible with the view of Topinard and others, that red-hairedness may be regarded as having the character of a variety of atavistic origin.

EUG. DUBOIS.

Africa, West.

At the Back of the Black Man's Mind. A Reply to E. T. (MAN, 1907, 93). By R. E. Dennett.

In Man, 1907, 93, E. T. was good enough to commence his review of my book with a very complimentary remark about my knowledge of the West African Negro's secret thought, which I would much rather he had not made. I must, at any rate, thank him for it. I may say at once that the aim of my book was neither to prove that I had this knowledge nor how I obtained it, but simply to give the information I had gathered to the public for what it was worth, in the hope that it might induce people at home to take an interest in the religion of the African which I endeavoured to describe. There are parts of Africa where the native is not granted the status of a human being. If I have been fortunate enough to show that he is after all a religious being surely this should cease?

My reviewer says that I have such a thorough knowledge of the native mind and of his manner of working that I suppose my readers to understand things which are absolutely clear to me, but which are to anyone else wrapped in obscurity. There may be some truth in this, as it must be remembered that out of the last twenty-eight years of my life only twenty-two months have been spent out of Africa; and one of my absences was of seventeen years' duration. But if my reviewer thinks that the meaning of everything that I have written is clear to me he is much mistaken. Where possible I have obtained the meaning of obscure passages from some intelligent non-Christian native. Take, for example, the instance pointed out by my reviewer where he says, "Wherever Mr. Dennett uses linguistic proof he takes such liberties "that it is almost impossible to find out the slightest basis for them; he says on "page 26 that:

"Kanga lumbi; hanga meta "Malamba malambakana, xivili

"means, 'Just as the sun rises and sets, so it is Mamboma's business to look after the crowning and burial of Maloango; and just as a woman cooks and intends to go on cooking (and watching her pots), so Mamboma watches over the Bavili." My reviewer continues, "The first line obviously expresses the idea of the rising and setting sun, and there can be no doubt about the meaning of the last word of the second line."

Now I venture to state that no foreigner could obviously understand that the first line refers to the rising and setting sun, and the last word of the second line should refer to the Loango language. I say of this passage on page 26, "I do not "think anyone to-day can translate this exactly," but it carries the following meaning with it (see above). I include myself as being of to-day (though a bit behind the times in European ways, perhaps), and admit that I could make nothing of it. It was paraphrased to me by a man called "Tate," an old native who took a kindly interest in my work. I am sorry that thirty-five words were necessary to explain the meaning of two. Is there anything remarkable to the European mind about this?

After discussing the xina (page 51) ku sala fumu, E. T. adds, "we may guess

"that this is connected with some tabu, but we certainly cannot know." My only answer to this is that xina stands for tabu, and that on page 163, xina ku sala fumu is connected with the fish Bafu.

Under Ndongoism my reviewer says, "It is curious that . . . Mr. Dennett "should not have found out that in reality no native worships the tutelary "images." I thought that this matter had been settled long ago. I think if I had noticed that the natives really worshipped their fetishes I should not have said that it, as a religion, was of small importance, neither could I have quoted the saying given in Note 13, page 85, where the Bavili clearly state that "God made man and "he made the Bakicibaci also." The native's answer to my question as to whether they made images of Nzambi seems to me to point to their not looking at them as "gods" to be worshipped. I quoted on page 86 the Rev. Comber's view as opposed to that of the Bavili. I show how and for what purpose they are used (page 93). Because I do not say that the Bavili do not worship these figures I hardly think that my reviewer had the right to conclude that I did not recognise the difference between the material figure and the nkici behind it. (Notes on the Folklore of the Fjort, pages 131, 135.)

About these figures E. T. goes on to say that in any neighbouring tribe I could have found images or charms of identically the same forms to which the same power is attributed. Is E. T. quite sure about this? I tried to separate those of Bavili origin from those of the kingdoms of Mayombe and Kakongo. Mavungu and Mitalimundembi, the great Kakongo fetishes, used often to be seen in Loango, but they were not of Loango origin, and certainly had no equal in size nor in figure in that country. Smaller local figures may have had the reputed power, but the popularity of these great figures rather proved that in fact they had not their virtues.

E. T. says that my translation of the word matali "is inexact, it simply means "rocks—nothing but rocks, and no idea of sun and heat is connected with it." I do not agree with him. On pages 101 and 102 I draw my reader's attention to eight compound words; Nos. 2 and 3 are composed of words with an opposite meaning. It is not unlikely, therefore, that No. 4 should be of a like composition. The Bavili certainly do recognise a difference between mania and matali. Mania are the comparatively cold stones found in rivers, but matali are the hot stones strewn about the hills; xi tali is an axe or a hatchet, bu tali is iron. Mania, then, are not the stones that produce the hatchet nor iron. Mania-Matali on this particular occasion are personified ideas. Mania the natives told me meant the "princely womb." Ma, then, is not a plural sign but a title of honour. Now Ngonde or ngondia means the moon, or Ngo's womb. Ngo is Kongo's wife, the mother of all the people (see page 51). She, then, is the ma in the word ma nia. Mania and ngonde personify the same power, possibly motherhood.

In the same way the ma in the word ma tali is not a plural sign, but a title also. We find this root ta in the word tata, father, as well as in the word ntangu or ntangua. The verb ta has a very indefinite meaning. Ta is a bow; now a gun; it expresses the noise made by the arrow whizzing through the air. Ntangu was translated as mother chaser; it also means, of course, the sun. Ta here, then, is to chase. The substantive "chaser" would be n-ta-i, which, by euphonic law, would become ntali, the li in the word ntangu being elided. Ma tali is thus connected with fatherhood and the sun. It is not, then, because mania-matadi represent hot and cold stones that they stand for the sun and the moon, but because both they and ntangu-ngonde personify fatherhood and motherhood.

Again, it is a riddle to my reviewer how in the word mwici I find the stem mbu. Ci or si is a word that gives the syllable it follows a sense of originality. The word

mu is found written mbu, and both mean the ocean. Père Visseq writes it mou; Bentley writes it mbu. The euphonic law, causing this change from mu to mbu, from ma to mba, from mo to mbo, will be found on page 522 of Bentley's Kongo Dictionary.

In his next paragraph E. T. says, "If Mr. Dennett has no better reason than "those given in his book, it is on a shaky basis that he builds up the fundamental "law of the Bavili as spoken by the Maloango." Yes, perhaps E. T. is right, as the so-called lessons were not taken down directly from the mouth of Maloango. But my reviewer seems to forget that what he calls the fundamental law is not only founded on these lessons, but really on the 144 or so Bakicibaci, which are given quite apart from the lessons, and which centuries ago certainly were much more perfectly taught. Each of these sacred words may be said to speak volumes, but we cannot read them, alas! I have rescued the names of these Bakicibaci from obscurity, my successors may perhaps do much with them.

I must end this by thanking my able reviewer for the evident care with which he has been good enough to read my book.

R. E. DENNETT.

#### REVIEWS.

Crete. Burrows.

The Discoveries in Crete, and their bearing on the History of Ancient Civilisation. By Professor Ronald M. Burrows. With illustrations. Reprinted, with addenda on the season's work of 1907. Murray, 1907. 5s. nett.

Professor Burrows' admirable little book has already been reprinted, with additions, and we hear that a third reprint is probable. This, for a book originally published in the summer of 1907, is good. It goes to show, firstly, that cheapness will atone for lack of illustrations, and secondly, that there is a public which is keenly interested in the Cretan discoveries, and wants to know more about them. This is as it should be, for the most important discoveries in Crete have been made by British explorers, Messrs. Evans and Mackenzie, and the others by Americans and Italians. Oddly enough, in Crete the Germans are nowhere. Not only have they never attempted to dig there—(the French have, and unsuccessfully)—but their comments on the results of the Cretan excavations have been unfortunate. Professor Doerpfeld's criticism of the Knossos results has been refuted by Dr. Mackenzie, and shown to rest upon complete misapprehensions. The German deductions from their work on the Mycenæan sites of the Greek mainland are hardly sufficient to enable them to sit in judgment on Cretan work. Had they dug in Crete their criticisms of the Cretan work would have carried some weight; as it is, they are not impressive.

Professor Burrows is justifiably insistent on this point, and with his support of Dr. Mackenzie most of us who have seen Knossos and the excavations in progress will join.

Professor Burrows' main position is that of sympathy with the views of Drs. Evans and Mackenzie, which, however, he subjects to a certain amount of useful criticism. His book is not a mere popular abrégé of the various articles in the Journal of Hellenic Studies, the Annual of the British School at Athens, and the Rendicanti dei Lincei, in which the English and Italian explorers have published their results, but a critical and comparative examination of them, which leads the critic to a cordial agreement with, and advocacy of, their views. A critical book of this sort on the subject, published at a low price, has been needed for some time past, even though it must necessarily be an ephemeral treatise, like all such written while the discoveries described are still in progress. Drs. Evans and Mackenzie are starting this year to excavate a whole region of the great palace complex at Knossos, which has hitherto not been

touched, and in the course of the work will no doubt be led by further discoveries to formulate new conclusions and modify old ones. So that Professor Burrows may have to write a new book very shortly! But this fact does not detract in the slightest degree from the value of his present work. Critical and suggestive books of this kind have a permanent value, in that they arrest and focus the attention at a certain period of the development of the work which they describe; they are landmarks of its progress, since they mark the development of general interest in and understanding of it. And at the time of publication they perform good service in suggesting new points of view to the excavators as well as to the great body of those who are interested in their work.

On the important point of the racial and linguistic affinities of the "Minoau" Cretans the usual doctrine is that they were "Mediterranean" Southerners, who spoke non-Aryan languages, not "Indo-European"-speaking Northerners. But Professor Burrows does not altogether dismiss the possibility that they may have been "Aryans" after all, quoting Mr. Cowley's analysis of the later Eteocretan inscriptions, which would seem to be in an Indo-European language, specially kin to Venetic. same time Professor Burrows notes that this proves nothing as to the language of the Minoans, of which we shall know nothing till we can read their hieroglyphed Meanwhile, the fact remains that Lycian is not considered by Fick, Kretschmer, and other philologists who have analysed what we know of it, to be by any possibility Indo-European. The same authorities consider that there are among Greek place-names and in certain Greek words elements of non-Indo-European origin. The Greeks themselves believed that  $\beta \alpha \rho \beta \alpha \rho \sigma \iota$  lived in the land before them. What is more natural than to suppose that Lycian was a survival of the old pre-Aryan tongue that was spoken in Greece before the Aryan-speakers came down from the north with their language, which combined with the older tongue to form "Greek"? This theory would fit in well with the view of the ethnologists that the Mediterranean has always been inhabited by a dolichocephalic dark race, into which the brachycephalic fair people from the north intruded. This intrusion must be placed after the fall of the Minoan culture. The Minoans were dolichocephalic; they represented themselves, and the Egyptians represented them, uniformly as dark-haired and ruddy-complexioned; the red-haired and fair (xanthochroic) type of Homer's heroes, the brachycephalic skulls of the Hellenic statues, came into the land later; they are the Aryan stock which died out in Greece before the Roman period, after imposing on the inhabitants a language Indo-European in structure, but naturally containing elements derived from their original non-Aryan idiom. That is the usual theory, which Professor Burrows states fully, but at the same time notes that the evidence as to Eteocretan may prove an earlier Aryan wave, before that of the Hellenes from the north, and that the Minoan culture may, but need not necessarily, be the civilisation of this pre-Hellenic wave; he quite rightly insists that the Eteocretans are not without question to be regarded as the later descendants of the Minoan Cretans.

If Eteocretan is Indo-European, the theory of an earlier Aryan wave from Italy and the Adriatic is probable enough. I would suggest that this western wave is to be connected with the known historical fact of a great eastward migration of Mediterranean tribes in the thirteenth century B.C., which caused widespread displacements of population in the Ægean, and drove waves of invaders upon the shores of Syria and Egypt. Among these invaders were many tribes of probable Cretan origin, and one, which all tradition as well as archæological evidence brings from Crete, the Philistine people, settled permanently in Palestine; it is very tempting to regard them as Minoans expelled from Crete by the Italian Aryan tribes from the west. As usual, in the course of Völkerwanderungen, as was the case in Europe in the fifth century A.D., invaders were mingled with invaded, expellers with expelled, often in the same

movement. Thus we may explain such names as Shardina and Shakalsha and Tuirsha as really of Italian origin, though also referring to the settlements in Asia Minor of the tribes from Italy. The traditional connection between the Etruscans and the Lydians is well known.

The possibility of another Aryan wave of different type from Asia Minor must not be left out of account. The Khatti or Hittites were certainly closely related to the Mitannians of Northern Mesopotamia, who, we now know from Dr. Winckler's discoveries at Boghaz Köi, were pure Iranians, and worshipped among their chief gods Mitra, Indra, Varuna, and the Nāsatya-twins. In the cunciform spelling the names hardly differ from the well-known Sanskrit forms. This was in the fourteenth century B.C.\* If the Hittites were Aryan Iranians too, and their kingdom extended, as is probable, west of the Halys as far as the Phrygian mountain-mass, I would point out that we have possibilities of actual Iranian invasion of the Ægean basin at an early period which cannot be left out of account. And there are odd resemblances here and there between the Minoan and Hittite cultures, though the latter was early Babylonized. But these resemblances may be due to the pre-Iranian "Mediterranean" element in Asia Minor, which may have combined with the invading Iranians to form the Hittite nation.

Such is the welter of theories in which we are still struggling, and they will all with the exception of some of the very latest developments which I have sketched above, be found fully discussed by Professor Burrows. In his appendix he definitely accepts Dr. Mackenzie's argument as to the southern origin of the Minoans, derived from their costume of the simple waistcloth like that of the Egyptians, which ought to come from a warm climate, obviously Africa. The cogency of this argument from the waistcloth has been present to the minds of those who are interested in the subject for some time past, but I believe that Dr. Mackenzie was the first to print it, and Professor Burrows is the first commentator to insist upon its importance. It fits in well with what comparative archæology teaches us as to the possible primitive connection or even identity of origin of the civilisations of Egypt and the Ægean. Africa, perhaps the Nile-Delta itself (the original land of the Ha-nebu), may have been the original "jumping-off-place" of the Ægeans. The peoples migrate from a colder to a warmer climate usually, no doubt, but why not also sometimes from a very warm to a less warm one?

Professor Burrows describes with some detail the discoveries in Southern Russia of a neolithic culture where pottery is closely akin to that of Minoan Crete. The chief explorer, Dr. Schmidt, seems to assume that this culture, which he regards as Indo-European, was the "mother" of the Minoan civilisation. But in his second appendix (September 1907) Professor Burrows shows that the discoveries of Dr. Vasić, director of the Belgrade Museum, prove that the so-called "neolithic" culture of Servia, closely related to that of Southern Russia, is the "daughter" rather than even the "sister" of the prehistoric Greek civilisation. Ægean influence, if not actual Ægean immigration, passed up the Vardar valley into Servia, where figures with the waistcloth are found, and also through Thrace to the Black Sea and South Russia. Probably Dr. Schmidt has never seriously considered the theory of African (Mediterranean) origin of the Ægean culture at all. It is difficult for some to throw off the yoke of the idea that everything civilised in Europe must necessarily be the invention of Aryan-speaking peoples. And a Russian archeologist is perhaps rather inclined to regard things Greek from the point of view of Russia, his starting-place is the Aryan north, whereas the Italians, planted in the Mediterranean, and we, with our

<sup>\*</sup> Mitt. der Deutschen Orient-Gesellschaft, Dec. 1907. The importance of this discovery to the study of Aryan origins is obvious.

national faculty of transplantation, and caring nothing whether we are, or the Minoanswere, Aryans or not, can regard the early peoples of Southern Europe from a Mediterranean point of view and without pro-Aryan prejudices.

An important feature in Professor Burrows' book is the very full treatment of the Egyptian evidence. His examination of the various schemes of Egyptian chronology is very good. All are now practically agreed on a point of the utmost importance to the Minoölogists, if we can so call them; that is, the date of the eighteenth dynasty, with which the Knossian periods, "Late Minoan" I, II, and (the beginning of) III, were contemporary, as we know from the evidence of the tombs of Rekhmara and Senmut at Egyptian Thebes, besides countless smaller items of evidence, which are cumulative. It is agreed that the eighteenth dynasty did not begin before 1600 B.C., or end later than about 1330 B.C. The reign of Thothmes III will fall in the century between 1550 and 1450, that of Amenhetep III at the end of the fifteenth century, and that of Akhenaten at the beginning of the fourteenth, though it may be noted that some Assyriologists (e.g., Lehmann-Haupt and Knudtzon) are inclined to date Akhenaten rather earlier than is Professor Eduard Meyer.

About the earlier period agreement has not yet been reached, but if we are to choose between the rival systems of Professor Petrie\* and Professor Eduard Meyer, † the probabilities are that we shall have to choose the latter; 1500 years between the twelfth and the eighteenth dynasties are impossible to credit. The whole history of the world since the foundation of the Roman Empire has only taken 2,000 years; and it is not much more than 1,500 years since the last Egyptian hieroglyphs were sculptured on a temple-wall. And how have nations and tongues changed in the time! Yet the other horn of the dilemma, the necessity of forcing the thirteenth dynasty and the Hyksos period into a period of only two centuries and a half is difficult enough to surmount, although Professor Meyer essays the task. Professor Burrows' own inclination is strongly in favour of Meyer's chronology, but there are still some important points to be cleared up before all of us will accept it unreservedly. Meanwhile, for those who must have dates, and cannot be content with dateless dynasties, for the period before the eighteenth dynasty Brugsch's system of dead reckoning based on Manetho will probably still continue to be used, with reservations. Certainty only begins with the eighteenth dynasty.

Professor Burrows is to be congratulated on his able discussion of this subject—
a thorny one—which most Greek archæologists before him have been inclined to
avoid, if not to ignore.

H. R. HALL.

Melanesia. Parkinson.

Dreissig Jahre in der Südsee. Land und Leute, Sitten und Gebräuche im Bismarckarchipel und auf den deutschen Salomoinseln. Von R. Parkinson.

Herausgegeben von Dr. B. Ankermann, Direktorial-Assistent am Königlichen Museum für Volkerkunde zu Berlin. Mit 56 Tafeln, 4 Karten und 141 Textabbildungen. Stuttgart: Strecker und Schröder, 1907. Pp. xxii + 876. 24 × 17 cm. Price 16 marks.

This book deals with one of the most interesting, and still one of the least known parts of the world, the last asylum of "the Anthropophagi and men whose heads do "grow beneath their shoulders," represented in modern travellers' tales as tailed men,

<sup>\*</sup> Researches in Sinai, 1905. † Abhandl. kgl. preuss. Akad., 1904.

<sup>‡</sup> E.g., in his latest pronouncement on the difficult subject of the thirteenth dynasty (Suzber. preuss. Akad., 1907), Professor Meyer accepts almost entirely an arrangement (proposed by Dr. Pieper) to which objection may be raised. And to find room for all the known Hyksos kings in the short period demanded by the German scholars is a considerable tax on one's ingenuity!

pigmy races, and the lost Ten Tribes. And no one is better qualified to write about this terra incognita than Herr Parkinson, who has been resident in the South Seas for thirty-three years, and for the last sixteen in the Gazelle Peninsula, New Britain, Much of the Bismarck Archipelago is still unexplored; there are many districts in New Britain where no white man has penetrated, where no word of the language is. known, and where life is untouched by white civilisation. But in other parts everything is changing with startling rapidity. Many of the customs described by Herr Parkinson are either dying out or altogether dead, and the next generation will know nothing about them. Native ceremonies, beliefs, administration, and social practices are weakened or eradicated by European influence or supplanted by European substitutes. Already natives bring their sons to show them in Herr Parkinson's collections objects once in use but now not to be seen elsewhere, and Herr Parkinson prophesies. that before more than twenty-five years have passed the natives of New Britain and New Ireland will visit the museums of Europe and gaze at the weapons and implements of their forefathers with the same astonishment as that with which we study those of our Stone Age ancestors.

Under these circumstances, with parts of the islands still unexplored, and parts already demoralised by white civilisation, it is impossible to give a full or complete description of the area as a whole, and Herr Parkinson laments the gaps in his record, some of which can never be filled in.

The volume is divided into twelve sections, the first seven of which treat of different parts of Melanesia: New Britain, the French Islands, and Duke of York; New Ireland, New Hanover, etc.; Saint Matthias, etc.; the Admiralty Islands; the Western Islands (Ninigo, etc.); the German Solomons, Nissan, and the Carteret Islands; and the Eastern Islands (Nuguria, etc.). These separate areas are first described, then their inhabitants, and the author's familiarity with the natives, in particular in New Britain, enables him to give a full record of native life in all its aspects, illustrated by excellent photographs. The later sections are devoted to general subjects dealing with the area as a whole: Secret Societies, Totemism, Masks and Mask Dances, Folk-Tales, Beliefs, and Languages. A short chapter treats of the native food-supply, agriculture and hunting, and the final part gives a history of the discovery of the various islands.

Herr Parkinson attempts to answer the question as to the origin and affinities of the inhabitants of the Bismarck Archipelago by noting their similarity to the Australians (especially marked between the inhabitants of New Britain and Queensland), and more particularly to the extinct Tasmanians. In support of a theory of common origin he inserts Wallace's map of Australia (p. 245) at the beginning of the Tertiary Period, when Eastern Australia consisted of a narrow strip of land from Cape York to Tasmania, and was inhabited by a woolly-haired race of men, nearly allied to, if not identical with the people of central New Guinea and the Bismarck Archipelago. In the same geological period Western Australia, separated from Eastern Australia by a broad expanse of sea, was occupied by a different race of men, probably allied to the Alfuro. When the rising of the land had connected Eastern and Western Australia, the smooth-haired Westerners pressed in, and destroyed and mixed with the woolly-haired peoples of the East, leaving the Tasmanians (later protected by the formation of Bass's Straits) untouched.

The present inhabitants of the islands show everywhere traces of admixture, straight and frizzly hair, dark and light complexions, occurring in bewildering proximity. The purest type is that found in the German Solomons, especially in Bougainville, where its preservation is due to the fierce and suspicious character of the natives, but even here the coast villages show signs of light-skinned, straight-baired Polynesian intrusions. Herr Parkinson does not place much reliance on the test of skin colour,

and he gives an interesting example of its variability in the case of two Germans who settled in one of the Duke of York group of islands. They wore no clothes, spent all day long exposed to the sun, and adopted a vegetarian diet. In course of time they retained nothing but their fair hair and beards to distinguish them from the Samoan missionaries in the same islands.

The inhabitants of New Britain are divided by Herr Parkinson into four groups :--

- The inhabitants of the north-east part of the Gazelle Peninsula, who probably came across from the south of New Ireland.
- 2. The Baining, in the mountains to the south of the Gazelle Peninsula, representing the aboriginal inhabitants of the island.
- The peoples of the interior to the south of the Gazelle Peninsula, such as the Sulka, Gaktei, etc.
- 4. The people to the west of the Gazelle Peninsula, nearly related to the inhabitants of New Guinea.

Of these the Baining are the most interesting, as representing the aboriginal inhabitants of the island, now driven to take refuge in the mountains from the invasions of the New Irelanders, with a higher grade of culture. The Baining have no tabu (shell money), no Duk duk, and no sea-craft. They make stone clubs with a heavy pierced knob of a type not elsewhere found nearer than in parts of New Guinea. They have characteristic dances and peculiar mask-like hats. They differ physically from their neighbours in their smaller build, and are at a lower grade of culture and inferior in mental ability. In the author's Volksstämme Neupommerns (Abhandlungen und Berichte des Königlichen Museums zu Dresden, Festschrift, 1899. No. 5) a group to the south of the Gazelle Peninsula was identified with the Baining, but this is now found to be incorrect.

The further west one travels in New Britain the more the natives resemble those of New Guinea, the "Semitic" nose being especially noticeable. A chief from Hannamhafen, when decorated, at his request, with Herr Parkinson's pince-nez, might, the latter tells us, have posed for a typical Jewish banker in the Fliegender Blätter.

It is interesting to find that while, on the one hand, many fictions regarding these regions vanish in the light of scientific research; on the other hand, travellers' tales take their place securely in the realms of fact. For example, the account of the caging of the girls in New Ireland, though resting on good authority, has often been regarded with suspicion, but the fact is now established beyond dispute. Herr Parkinson gives two photographs of the tiny hut made of plaited palm leaves, raised above the level of the floor, in which the girl is confined for twelve to twenty months before matrimony. The main objects seem to be fattening and blanching, both being considered most important aids to beauty in Melanesian eyes. No one but members of her family are allowed to see the girl who is undergoing this beautifying process, but Herr Parkinson was fortunate enough to see one who had only just emerged from her seclusion; her skin was as fair as that of a somewhat dark Samoan, and she was "as fat as a pig," and she sat surrounded by an admiring group of women, who from time to time stroked her fat arms and legs, or patted her bulging cheeks.

A. H. Q.

### ANTHROPOLOGICAL NOTE.

An exhibition of one hundred facsimiles of Bushman rock paintings and chippings, copied by Miss Helen Tongue, is being held in the Library of the Royal Anthropological Institute, and will remain open until June 6th.

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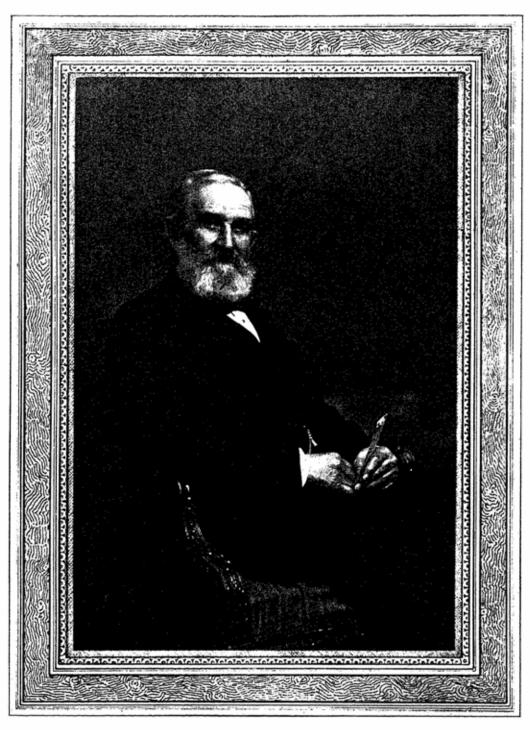


Photo Elliott and Fry.

## ORIGINAL ARTICLES.

Obituary: Evans.

With Plate G.

Avebury.

Sir John Evans, K.C.B., D.C.L., F.R.S. Born November 17th, 1823; died May 31st, 1908. By the Right Hon. Lord Avebury, D.C.L., F.R.S.

In Sir John Evans the country has lost one of its greatest citizens, and some of us one of our dearest friends.

He was born on November 17th, 1823, and was the son of the Rev. Arthur Benoni Evans, D.D., headmaster of the Grammar School at Market Bosworth in Leicestershire, where he received his earlier education. It was at first intended that he should go to Oxford; but he was sent instead to Germany as a preparation for a business career. He made himself, however, a good classical scholar, and was well versed in Hebrew.

In May, 1840, when only sixteen, he was brought into the business of his uncle, Mr. John Dickinson, F.R.S., founder of the great paper-making concern in which he became a partner in 1850, and with which he was actively associated until it was turned into a limited company in 1885. He remained until his death president of the Paper Manufacturers' Association.

In 1864 he published his great work on the coins of the Ancient Britons, for which he received the Allier d'Hauteroche prize from the French Academy. His discussion of the derivation of the Ancient British gold coins from the beautiful coins of Philip of Macedon is most masterly.

In 1872 he issued his monumental work on the Ancient Stone Implements, Weapons, and Ornaments of Great Britain, and in 1881 that on The Ancient Bronze Implements, Weapons, and Ornaments of Great Britain and Ireland, which are still the two standard works on their respective subjects. He also contributed many memoirs to archeology, to the journal of the Numismatic and other scientific societies.

From boyhood he was an enthusiastic collector, and had certainly the finest private collection of antiquities in this country, or perhaps in the world. It is difficult to say whether his collection of coins, of gold ornaments, of bronze objects, or of stone implements was the most interesting, valuable, and illustrative of the subject.

In 1852 he was elected a Fellow of the Society of Antiquaries, and in 1864 of the Royal Society, of which he was elected vice-president in 1876, and treasurer for no less than twenty years—from 1878 to 1898—and several times vice-president.

He became secretary of the Numismatic Society in 1849, and president in 1874, an office which he retained for over thirty years; in fact till his death—a length of office almost without a precedent.

He was president of the Geological Society in 1874-6, of the Anthropological Institute in 1878-9, of the Society of Antiquaries from 1885 to 1892, and of the Egypt Exploration Fund from 1899 to 1906. He was president of the Society of Chemical Industry in 1893, of the Ethnological Department of the British Association in 1870, of the Geological in 1875, of the Anthropological in 1890, and of the British Association as a whole at the Toronto meeting in 1897. In 1900 he was chairman of the Society of Arts. In 1880 the Geological Society presented him with the Lyell medal. In 1865 he was elected by the committee a member of the Athenaeun Club, the only honour which Herbert Spencer would ever accept. He was a D.C.L. of Oxford, LL.D. of Dublin, D.Sc. of Cambridge, D.C.L. of Toronto, and honorary member of various foreign societies. In 1892 he was created a Knight Commander of the Bath; he was a correspondent of the French Academy, and a trustee of the British Museum since 1885.

Besides being a great man of science and a successful man of business, Sir John Evans took a most active and useful part in local affairs, for which his capacity was first rate. He was High Sheriff in 1881, chairman of Quarter Sessious, vice-chairman and afterwards chairman of the Hertfordshire County Council, and when he retired from the chairmanship his colleagues presented him with his portrait by Mr. John Collier and a silver-gilt cup. As the West Herts Observer said, "His masterly grasp of essentials, his statesmanlike vision, his marvellous capacity for public business of all kinds was the admiration of all who knew him. And now, mourned by a "whole county for whose welfare he worked so long and so strenuously, he goes to his rest full of days and full of honours."

The trusteeship of the British Museum afforded opportunities both for his scientific and administrative abilities. He was one of the most active and useful members of that eminent body.

In private life he was a delightful companion, a genial host, and a staunch friend. In 1860 Sir Joseph Prestwich invited Sir J. Evans and me to go with him to Abbeville to examine the collections of M. Boucher de Perthes, who had found flint implements in the Somme gravels. His figures, however, did not do them justice, and they were generally regarded as accidental in their origin. We satisfied ourselves, however, that they were indisputably of human workmanship, and the trip was the precursor of many others and of a close and intimate friendship of over forty years.

He first married his cousin, the younger daughter of Mr. John Dickinson; secondly, Miss Phelps. His widow, Lady Evans, a daughter of Mr. Charles C. Lathbury, is herself a classical scholar and a keen antiquary.

His eldest son, Arthur, has made for himself a great and well-deserved reputation as an archæologist by his interesting discoveries in Crete. He is an F.R.S.—the fifth generation of his family to be so. The second son, Lewis, inherits his father's business ability and carries on the family business.

As The Times justly observed, until quite recently "his apparently unfailing "vitality seemed to defy the advance of time." He attended the meeting of the Trustees of the British Museum on the 23rd May and his mind remained to the last as clear, bright, and powerful as ever. But his health had been for some time a source of anxiety to his friends. At last an operation became necessary, and he had not strength to rally from it. He will be much missed and deeply mourned.

AVEBURY.

India.

Rose.

On Caste in India. By H. A. Rose, Local Correspondent of the Royal Anthropological Institute.

The wholly admirable chapters on "Ethnology and Caste" and "Religions" in the new edition of the *Imperial Gazetteer of India*, Vol. I., are by Mr. H. H. (now Sir Herbert) Risley and Mr. W. Crooke, respectively. Both will doubtless be read with the interest they merit, and the following remarks are penned in the hope of inviting the attention of anthropologists to them. In one respect the authors were unduly handicapped, only sixty-six pages being available for ethnology and caste, and but forty-four for religions—not a very generous allotment for such wide subjects when dealing with a fifth of the human race. But the authors have done wonders within these narrow space-limits.

It is perhaps to be regretted that caste and ethnology had perforce to be treated as one subject, because "ethnology" deals mainly with race, whereas caste is essentially a branch of sociology into which race only enters as one of several factors. So diverse, however, are the conditions in India, and so confused is Indian thought on this subject, that in practice we are often compelled to speak of "tribes and castes" almost as if they were synonymous.\* It is therefore necessary to caution the English reader against a misconception of these terms. A caste is essentially a sociological group (but not a unit), while a tribe is a natural growth from a definite ethnical seed (with, it may be, affiliated elements from other sources). To attempt, then, to ascertain the racial origin of a caste is to beg the whole question of its constitution. All the main castes in India would appear to be social groups, often very highly organised, but of heterogeneous origin and not ethnically homogeneous. A tribe, on the other hand, is usually in the main homogeneous, though extraneous elements may have been absorbed into it by the fiction of adoption.

In the earlier stages of ethnographical investigation in India it was too commonly assumed that the main Indian groups were racial units and such expressions as "the Rājput race," "the Jāṭ race," "the Paṭhān race," still occur far too frequently. The Jāṭs, for instance, are a congeries of tribes, the greater number of which have been yeomen or peasant cultivators from time immemorial; but many of them have sunk from Rājput status to their present social grade, while others have in all probability risen to it, as some are rising even now.

It is, however, to be remarked that in Ethnology and Caste the Jats, Rajputs, Ahīrs, Gūjars, and other congeries of tribes are spoken of as "castes" of the tribal type. For the benefit of those tiresome people who want to define everything, even when it is logically indefinable, "caste" is defined on p. 311, as, inter atia, forming a single homogeneous community. To speak, therefore, of the Jats as a caste is to postulate that they are "homogeneous." But in what are they homogeneous? In race?-That would assume that the Jats all belong to one race, which is one of the most debateable questions in Indian ethnology: or in social status?-But the Jāţs vary in social status enormously, some, e.g., the ruling families of native states, avoiding widow re-marriage, while the ordinary Jat peasantry of the Central Punjab practise, even if they do not avow, polyandry. Or are the Jats to be regarded as homogeneous in religion? Certainly not, since many are Sikhs, more Muhammadans, That they profess to follow the same calling (agriculture) and most are Hindus. may be conceded, but that does not make them homogeneous: by the definition homogeneity is a different thing. A caste is "almost invariably" endogamous, but the Jats are not so, for while the higher classes of them are extremely particular in forming matrimonial alliances, the lower orders are singularly lax and readily espouse women of menial castes. No doubt it is highly convenient to talk of the Jat caste, and if one regards the definition on p. 311 as an elastic one, it is not open to serious objection; but, strictly speaking, the term "Jat caste" is incorrect and apt to mislead, as soon as we attempt to define the word "caste" rigidly.

But if one quarrels with a definition one is not unnaturally met with the objection that "caste" ought to be defined somehow, and that if the Jāṭs do not form a "caste" they must form something else. The necessity, however, is not apparent. Indian institutions are, if possible, even looser than most Indian thought, and we are not bound to formulate precise definitions for nebulous Indian social terms or ideas. To the precisian it is no doubt trying to find that the native terminology is too vague to be translated, but what is one to do with a man who always describes himself as a "potter," Kumhār, by  $race\ (z\bar{a}t)$ , although he has never made a pot in his life and lives by plying donkeys for hire? All we can do is to examine the actual facts and see how these so-called castes or races are constituted.

To return to the facts: the Pathans are composed of a congeries of Iranian tribes

<sup>\*</sup> It is, as a rule, easy to distinguish "caste" from "tribe" in India, but the Indian peoples themselves appear to constantly confuse the two things, and the looseness of their terminology is largely responsible for much of our loose writing about "caste." Dr. Rivers' definition of Caste (Man, 1907, p. 142 supra) is open to certain criticisms.

who have affiliated Hindkî (Indian) septs. The Rājputs are divided into countless branches, and they comprise thirty-six "royal" clans, one of which is called Huna or Hun; as there is no reason whatever to imagine that a pure Aryan clan would ever gratuitously assume the title of Hun, it is perfectly permissible to suppose that this Rājput clan is really Hun by origin and nothing else. It is indeed by no means impossible that other Räjput class are Mougolian or Dravidian in origin, and we know, as a fact, that on the borders of Tibet all ruling families assume Rājput status. These facts hardly justify the assumption that the Jats, Rajputs, or Pathans, are of one race by origin; and, looking to the fact that India has been constantly invaded for centuries by various races, the probabilities are greatly against any such theory. No doubt the tendency of invading races to break up into groups of varying status is very strong in India; but there is also a marked tendency to coalesce into new groups, to form tribal confederacies, and even rude political organisations. And into these new groups are admitted not only the conquering but the conquered races. Thus, in the Punjab we find tribal confederacies like the Meos, composed of several distinct Rajput elements; a community like the Gaddīs, with a rude caste organisation within itself, and a group, which we cannot call a caste, of Kanets or hill peasants, some of whose septs are of historically proved Rājput origin. In studying the Indian social system we must look at all the facts and factors, not merely at the most striking. The salient feature of Indian society is its unending fissiparous tendency; but its power to combine and crystallise is also great, though obscured by the absence of accurate and detailed information.

It is not then difficult to form some idea of what has happened, as horde after horde has invaded India. The invaders are not uniformly or invariably successful. Invasions last for years, sometimes for centuries. A body of invaders is defeated and reduced to slavery—as not infrequently happened to the earlier Mughal marauders. In one tract it establishes itself as a dominant tribe, but is soon reduced to a dependent political position, driven to seek a living by cultivation or even handicrafts. The conquered aboriginal race raises its head again, here and there, and regains its dominant position, making the invaders its subjects, its landowners, artisans, Within recent historic times the Mughal and the Afghan have invaded India and added appreciably to its racial ingredients, yet the social position of the Mughal and Pathan varies infinitely. The Baloch, another very recent invading element, is the dominant race west of the Indus, a rather inferior peasant or camel-man in the southern Punjab, and a criminal tribe near the Jumna further east. history tells us has occurred in the past few centuries probably occurred in the earlier centuries. From the dawn of history India has not been merely subject to countless invasions, but exposed to ceaseless internal convulsions, and in these the invaders have lost ground and regained it, lost it again and risen again, until no one can say with any certainty that a given tribe represents an aboriginal race because it stands low in the social scale, or that a dominant tribe or ruling clan is descended from an invading horde.

As tribes tend to coalesce into confederacies, so do fragments of tribes tend to group themselves together into castes, and to a certain extent it is community of occupation which binds these heterogeneous units into castes. But, as emphatically stated above, caste is not a social unit, every caste of any importance being split up into two or often more sub-castes of markedly different social status. Through the social warp runs the woof of occupation, but the warp is of very unequal quality—and the woof varies equally, to use a clumsy metaphor. To give an example:—

The great bulk of the sunārs or goldsmiths\* belong to the Sunār caste, but the Sunārs who confessedly belong to this caste are divided into endogamous sub-castes of

<sup>\*</sup> All goldsmiths are not by caste Sunārs, nor are all Sunārs goldsmiths. Instances of Sunārs. holding commissioned rank in the Native Army could be cited.

wholly different traditional origins with different customs and of distinctively different social status. So, too, we speak of the Bāniā caste, but the generic term  $b\bar{a}ni\bar{a}$  includes very diverse groups, one of which is traditionally Chamār (leather worker) by origin. Not to multiply instances, M. Senart's second criticism (alluded to on p. 337 of Vol. I.) appears to be based on a radical misconception of the nature of caste because community of occupation, never welded together in a homogeneous whole, scattered units which were not already homogeneous. All it did was to unite in a loose organisation a number of heterogeneous elements which remained distinct, preserving their relative social positions, although the social standing of each was more or less modified by its adoption of that occupation. To take a concrete instance: a Khattrî who became a  $sun\bar{a}r$  by occupation eventually sank to a Sunār by caste, while a low-caste man who became a Sunār rose in the social scale but never attained to the position held by his Khattrî-descended caste-fellow. To this day the Jāṭ who is descended, or claims to be descended, from a Rājput stock holds his head higher than one whose forbears never aspired to be anything more than Jāṭ-yeomen.

If we regard a caste as a heterogeneous body, as in fact every great caste is, we shall at once see that caste may be an organism of a lower type than a guild, but it does not grow only by fission and each step in its growth detracts little, if at all, from its power to advance and preserve the art which it professes to practise (p. 343). On the contrary, caste is a real step in advance, it is based in its inception on combination and often grows by accretion: its growth may make for progress, since if a segment of it adopt higher social usages or a loftier branch of its art that segment will inevitably tend to form a sub-caste higher in function and in social standing than the backward fragments; while, if any segment fails to maintain the social and functional level of the caste, it will be cut off and, if not utterly excommunicated, confined to a sub-caste of lower standing than the main body.

Caste in brief is progressive as well as conservative, simply because no caste is a rigid social unit. Sociologically, then, caste makes for progress; but progress is slow because little is left to individual initiative, and a substantial fraction of the easte must advance in union before progress is possible. This is consonant with the whole scheme of Hinduism, which does not proselytise the individual but the clan, which will permit no individual man to rise to a higher caste, but will readily raise a whole family, or preferentially a whole tribe, at a bound from casteless savagery to Rājput status.†

So much for caste. To return to ethnology we read on p. 290 of "the curiously "close correspondence between the gradations of racial type indicated by the nasal "index and certain of the social data ascertained by independent enquiry." Upon

<sup>\*</sup> It is not easy to take M. Senart seriously as a writer on Caste: e.g., on p. 30 of Les Castes dans l'Inde, he says, "Le morcellement en sept castes semble, si j'ose ainsi parler, être de style dans le Penjah." It has puzzled the present writer for years to conjecture on what authority this suggestion is based. It is not based on facts.

<sup>†</sup> These remarks lead us to a consideration of the late Mr. Nesfield's theory of caste. That writer, one of the most suggestive who have ever discussed the origin of caste, laid great stress upon function as the foundation of caste, but he undoubtedly pushed his theory to an extreme in paralleling caste with the progressive stages of culture. Moreover, his functional theory of caste appears to be open to grave criticism, in that it fancifully classifies castes in the order of their chronological development instead of the order of their intrinsic status. In every society the warrior, the scholar, and the priest rank higher than the artisan, the menial, the serf, or even the trader. Nesfield, then, had no necessity to seek a clue to the gradations or formation of caste in the history of human industries. It is sufficient to look to their natural gradation. But Nesfield rendered great services to the study of caste by emphasising the importance of function. When he wrote the internal organisation of caste had not been fully studied, and it is a question whether it has even yet been adequately investigated. But the more it is examined the greater does the influence of function appear to be, although function is certainly not the sole factor in the evolution of caste.

this correspondence is based, we must understand, the racial theory of caste. It is not, however, quite clear that the nasal index indicates any gradations of racial type. To paraphrase a sentence on p. 290, might it not be found that, if we took a series of social classes in England, France, or Germany, and arranged them so that the class with the finest nose should be at the top, and that with the coarsest nose at the bottom of the list, this order would substantially correspond with the accepted order of social precedence? Let us state the racial theory for France. The old noblesse was once regarded as a foreign element of Germanic origin, whose racial antagonism to the lower orders was one of the causes of the Revolution. But Fustel de Coulanges demolished that theory when he showed that there had been a strong infusion of Germanic blood into even the lowest classes, notably among the coloni, while the Gallo-Roman nobility were by no means wholly replaced by Germans. If, then, it were discovered that the old noblesse had a higher type of nose than the French peasantry, would it follow that the former were of a different race to the latter?

But whatever the answer to this question might be, the order of social precedence described on pp. 324 to 328 does not appear to be established or accepted. the account of the Brahman groups on p. 326 shows, there are Brahmans and Brahmans, some very low down indeed in the social caste scale, even in Bengal, so that it is not easy to understand why the first class is reserved for the Brahmans, many of whom only hold third-class tickets. Outside Bengal, notably in the Punjab, the Brahmans vary more markedly in status. Some of them stand, no doubt, on the top rung of the social ladder, but many are so degraded by function that they are the lowest of the low. Barely on a level with the unclean sweeper is the "sin-cating" Brahman who takes offerings after a death, yet even he finds other Brahmans to disdain, for he has sin-eaters of his own, the outcasts of an outcast whose degradation no words can describe. As a body the Brahmans have no claims to be ranked high in the social scale, and, if they have anywhere such a claim, the account of their origin and varying fortunes on pp. 404, 406-7, and 412 of this work shows that they are in no sense of a higher or purer race than the groups from which they sprang. As a matter of fact, we know that some Brahmans are of aboriginal blood. History tells us of no Brahman race, but it does tell us of Brahman dynastics promoted to Rajput status. In the face of facts like these how can it be maintained that the two sets of observations, the social and the physical, bear out and illustrate each other (p. 290)? The high nasal index of the Bengali Brahman is surely not due to racial superiority.

The contrast between the Gūjars and Sikhs of the Punjab and the Mal Pahārīas of Bengal is most instructive. As we go eastwards into a hotter, damper, and more enervating climate the physical type deteriorates. Centuries of residence in such a climate develop the "aboriginal" type, and invading or immigrant races breed down to this type with extraordinary rapidity. A remarkable illustration of this degeneration, or it may be adaptability, is found in Burma, where the near descendants of Europeans by Burmese women hardly retain a trace of their European blood. Yet the fact that they are partly of European blood is undeniable. It is significant that the marked differences in the nasal indices are as between the Punjab and Bengal, not as between the highest caste and the lowest in the same Province.

In conclusion a few remarks may be offered on the system of anthropometry essential in India. It is not sufficient to take the measurement of a caste or race as a whole. It is of vital importance to obtain measurements of comparatively small homogeneous groups whose status and descent can be ascertained with some degree of precision. To take an example, the Sikhs are a religious community recruited from Jāts (mainly), Khattrîs, Aroras, Brahmans, Labānas and even Chuhrās (the latter are on conversion admitted into the Mazbī groups in due course). Brahman and Khattrî Sikhs would probably exhibit a distinctly higher nasal index than Chuhrās or even Labānas. Again, in measuring

Brahmans it would be useless to lump together Sārsuts, who minister to Khattris and Aroras with Chämarwas, who minister to Chamars: nor would it be satisfactory to confuse the higher functional groups with the Dakauts and Gujaratîs or with the Pushkarnas. To measure any caste in the lump is to assume its ethnical homogeneity, the main point in issue. The field in India is so vast that authropometrical data can only be accumulated by degrees and the fullest local knowledge is necessary if the H. A. ROSE. measurements are to possess any final value.

## Archæology.

Kendall.

Palæolithic Microliths. By the Rev. H. G. O. Kendall, M.A. In some collections of prehistoric antiquities minute specimens of human

handicraft may be found. Fig.1 is a case in point, an exquisite little borer made from a piece of a broken flake. The trimming near the point is exceedingly delicate and is done from each face alternately. The little tool probably belongs to the British period, and all of those above mentioned are of Neolithic age. They are accepted by antiquaries as being the work of man's hand without question. Many of them consist of flakes with good bulbs. The violence of natural phenomena cannot be responsible for them, inasmuch as they are found on the surface of the ground.

In 1903 I dug out in situ some Palaeolithic implements (now in the British Museum) at Welwyn at a depth of about 12 feet in some thin layers of gravelly sand. Here also I found flakes and trimmed pieces of flint, together with tiny flakes, &c., similar in kind to the above-mentioned neolithic microliths. Some of



them range from 2 inch to 1 inch in length and show evident signs of manipulation after having been struck off from the parent block.

Not long after my Welwyn finds my friend, Mr. F. J. Bennett, brought to light numbers of remarkable microliths, even smaller than mine, from quarternary gravels in Essex and elsewhere. requested me to examine the gravel at Knowle Farm Pit, Savernake. At that time a good section in the river silt was open and I had dug out implements of

Some of these occurred in a thin sandy stratum and were normal size in situ. scarcely, if at all, water-rolled.

On examining this fine silt I found in it large quantities of microliths and minute flakes. By microliths I mean tiny flakes or other pieces of flint which have been trimmed or used by man at some part of the edge, and in some cases even flaked over the outer face. They occur in large numbers only in the fine silt. Outside of this it

is not nearly so easy to find them. The same holds true of implements, &c., of normal size in this pit. Some of these delicate, and sometimes beautiful, little tools would, if found upon the surface, be picked up as interesting and excellent neoliths. I append figures There are others in my collection of some of them. which are smaller, by a good deal, even than Fig. 6. Fig. 2 is really a small implement made from a flake and flaked all over the outer face, except on the dotted





FIG. 3.

portion, which represents a patch of the original crust. Like many implements of normal size it has been used for scraping on the lower right edge in the face view. As may be seen from the edge view, it is here as definitely chipped as any

neolithic scraper. The implement has also been used at the right upper edge, which is finer. The stone is blackish, lustrous, and scarcely abraded, and was raked out in situ.

Fig. 3 is a beautiful little tool, lustrous and of a yellowish-brown colour. It is evidently a borer and takes the tip of the forefinger and

thumb very conveniently. The outer face and one edge view are represented.

Fig. 4 is minutely chipped almost all round the edges.

It, also, is a borer. But, in addition, it has been chipped to a tiny cutting edge, in the most regular and beautiful





Fig. 4.

manner at the right-hand lower edge of the inner face. The drawings of it are, from left to right, outer face, edge view, inner face with bulb of percussion at the bottom. There is a remarkable smoothness about parts of this little stone, as though constant attrition in use had affected some of its surfaces. Fig. 5 is a first-class little scraper,









with bulb of percussion on the inner face and edge chipping all round the horseshoe end. At the right-hand shoulder in the first drawing on the left is some minute detailed and regular chipping such as one frequently sees on the same part of paleolithic scrapers of normal size (of which I have a

F 1G. 0.

number) from this pit, and on some neoliths also. Both the side edges have also been used. The left-hand drawing is accidentally made with too straight and too slanting a top. The other views show inner face (with more correct drawing of the horseshoe end), horseshoe end showing chippings, and edge view. The stone is actually re-chipped from an older tool, as plainly as many a re-chipped

Fig. 6 is a tiny implement of ovate type, chipped all over both faces, and used at one end for scraping. It speaks wonders for the skill and ingenuity, and perhaps the humour, of palæolithic man that he could fashion so tiny a thing in stone.





FIG. 6.

Fig. 7 is a scraper, with bulb on the inner face. It is minutely and beautifully chipped, on one face or the other, round its edges.

The stones are drawn natural size. I have other beautiful little instruments in my collection. All the best, such as those figured here, are as plainly the products of human skill as any neolithic tool. There can be no doubt whatever that the latest palwolithic men at this site, and, to some extent, those of an earlier period also, did some extra-





FIG. 7.

ordinarily fine work with these minute tools. What that work was we have yet to find out.

It should be added that some minute chips not worked at the edges are, no doubt, mere waste fragments from the manufacture of larger tools. These, however, are not trimmed at the edges. It is manifest that just as some

of the flakes of normal size, knocked off in the manufacture of an implement, were re-touched and used, and others were not, so also has it been with the minute specimens.

H. G. O. KENDALL.

Malay Peninsula: Folklore.

Scrivenor.

Malay Beliefs concerning Prehistoric Stone Implements. By J. B. Scrivenor. (Communicated by the Secretary.)

Last June, when in the company of a number of Fellows of the Royal Anthropological Institute, I mentioned a curious belief held by the Malays of the Federated Malay States concerning the well-known stone implements, or batu lintar, which is generally translated "thunderbolt stones." This belief is to the effect that the stones originate in the ground, and sooner or later burst into flames and disappear. My remarks were received with some doubt, and it was suggested that my authority, Mahomed Mansur, a Malay who works for me, had invented the story in order to account for batu lintar missing from my collection. Mansur, however, besides being a thoroughly honest fellow, had never had any opportunity of stealing batu lintar from me, since I had none in my possession, and I determined at the time that when I returned to the Federated Malay States I would ask Mansur to write me an account of batu lintar according to Malay ideas.

Mahomed Mansur is a Perak Malay, the son of a minister of the ex-Sultan, Abdullah. He is fairly well educated and has travelled with me, or for me, in all four of the Federated Malay States. I do not think he believes implicitly the things he has written here about batu lintar, but he does not recognise them as stone implements, and he tells me that he has never heard a Malay suggest that they fall from the sky, as is supposed in the case of our "thunderbolts." My impression is that the idea of "thunderbolts" has been connected with these stones by Europeans who have heard a little of the Malay notions concerning them, but have not followed the matter farther. It will be noticed that Wilkinson, under lintar in his dictionary, says that to the Malays their origin is "wrapped in mystery."

The part that lightning plays in Mansur's account is obvious and need not be enlarged upon. I should like, however, to point out the manner in which the rending of a tree by lightning is brought in. Note particularly that according to a Malay's ideas the stroke comes from below, "from the trunk to the branches."

I have questioned Mansur as to the cause of lightning. He tells me it is explained by Malays in many different ways. One cause is a Jin throwing a batu lintar at his enemy. Another is a big animal, such as an elephant or a bison, shaking himself in the jungle.

To anyone acquainted with these Malays, Mausur's story of the batu lintar is not a surprise. They love to weave extraordinary stories round things they do not understand. I have been told stories in Pahang about natural objects that are even stranger than this of the Jin and his weapons. I suspect that the idea of "thunderbolts" would seem too plain and straightforward to the average Malay.

I append a free translation of Mahomed Mansur's account of batu lintar:-

"There are certain things called batu lintar. Men say that a Jin makes them out of stiff clay and that they are always found in the ground. The Jin piles them one above the other, close together, while they are still soft. If they are left they become quite hard. When they are hard enough, if the Jin wishes to kill an enemy (another Jin), he takes out the stones, and the power of the Jin is such that they become red like fire and (are surrounded by fire so that) their shape is like a coconut. If any mortal comes within range of the emanations from these stones, though they may be thirty depas distant, he cannot help fainting away. If a tree is struck by one, it is as though that tree were struck by a bullet, but the mark runs zig-zag from the trunk to the branches. Men who are struck by the emanations from these stones become as though burnt and turn red; but no one is ever struck by the stone itself (i.e., a tree may be struck, but a man never). Men say that the Jin who owns the stones does not purposely wound a man's body. When the Jin throws a stone at an enemy and the enemy in trying to escape runs close to a mortal, then the stone follows him and in passing causes him to faint away. When a man has fainted away one must not touch him. If he is touched he is sure to die. But if one searches near the man it will be found that the Jin has thrown down a tuft of grass tied in a knot. If this is dipped in water and the water sprinkled over the man who has fainted, he recovers. Again, men say that when one finds a batu lintar that has not yet burst into flames it will never burst into flames if a little bit is chipped off the stone. But if this is not done when there is a high wind that batu lintar will explode with the noise of a cannon. Therefore, whenever a man finds a batu lintar, he chips it slightly."

J. B. SCRIVENOR.

### Africa: Rhodesia.

Eyles.

# Firemaking Apparatus of the Makorikori. By F. Eyles.

The accompanying figure shows the apparatus for producing fire in use at the present time among the Makorikori in the neighbourhood of Mount Darwin, Mazoc, South Rhodesia. It consists of a small piece of greyish flint, a "steel" in the form of a long oval circlet, formed by bending a strip of native-worked iron round until







the edges overlap, and the funuel-shaped neck of a small gourd containing charred vegetable fibre. In use the gourd is held in the palm of the left hand, and the flint between the thumb and first finger of the same hand; the steel is then struck sharply across the edge of the flint with the

right, until a spark falls into the gourd and sets the fibre smouldering. A little bunch of another kind of fibre or bark is then brought in contact with the glowing fibre and blown into a flame. The fibre used to catch the spark is called *ulenje*, and is prepared from the silky inner fibre of the leaf of some plant not identified.

F. EYLES.

#### REVIEWS.

## Africa, West.

Desplagnes.

Le Plateau Central Nigérien. By Lieutenant Louis Desplagnes. Paris : Emile Larose, 1907. Pp. 504. 25 × 16 cm. Price 12 francs.

This work is a very suggestive study of the races who inhabit the uplands to the south of the bend of the Niger, and between 14 and 17 degrees north latitude. Lieutenant Desplagnes spent two years in the western Sudan between 1903 and 1906, sent, as Dr. Hamey informs us in an introduction, on a special mission to study this hitherto little known region. The book is divided into four parts, of which the first two treat respectively of the archæology of the "Plateau Central" and the origin of Sudanese or Negroid Clans; the third of the Habe, or primitive inhabitants of the Hombori and other rocky regions; while the fourth is devoted to general conclusions. The mission was fruitful in finds of neolithic instruments. Monuments of upright stones or dolmens were discovered near Bamako on the Upper Niger. These dolmens seem to be similar to those described by Mr. Partridge in his book, Cross River Natives, on the one hand, and on the other to the monuments of the Hoggar country in the Sahara.

The chapters on sepulchres are interesting. The subject is treated very fully and is well illustrated.

The large tumuli, which are not uncommon throughout the western Sudan, are shown to be probably formed by some such method of interment as that described by EI Bekri as having been practised at Ghanata in A.D. 1050.

The principle of these tombs again is similar to that of the Numidian tombs

discovered near Oran and Constantine, and the inference is that their makers were of north African or Berber origin.

In the ethnographic portion of his book Lieutenant Desplagues is on more debateable ground, though his main thesis seems sound enough.

He supposes that originally the Sudan was inhabited by short brownish negrillos, and tall Nilotic negros. The former were gradually pushed south, while the latter (of whom the author thinks the Nasamonians of Herodotus were a branch) amalgamated with red invaders from the north, of supposed Semito-Sumerian origin.

These red invaders were of the clans Ma (fishes), Wa (birds), or Så (serpents) who by various combinations with each other and the indigenous blacks formed the existing Sudanese peoples. For instance, Wangara (a Mandingo tribe) would be formed by Wa (a bird clan) having amalgamated with Gara (a red clan). Fulani are Wa (birds) belonging to the Anna (Ghana) confederation. Mande or Mandingo is Ma (fishes) combined with Nde, an indigenous tribe.

These various clans, Ma, Wa, Gara, etc., are traced back into remote antiquity and identified by the author with the Getuli, Garamantes, etc., and in the case of the Ma with a people called Masa mentioned during one of the early Egyptian dynasties.

The theory may appear pushed somewhat far on rather slender evidence, and, certainly, it would have been strengthened, had it been shown that the same clan system could be traced right across the Sudan. Facial marks and tattoos are also important evidence. Unfortunately, Lieutenant Desplagnes does not give us any information on this head.

The third portion of the book deals with the ethnography, customs, religion, etc. of the Habes, and includes some interesting folk-stories related to the author by his interpreter. According to Lieutenant Desplagnes an amalgamation of the Nilotic, or tall, slightly-prognathic negro, with the "red invader" produced the mountain Habe of to-day, while a union of the same people with the Fulani produced the Fulani-Kri-Habe. The mountain Habe are called Habe-Kado. But in reality Kado is simply the singular of Habe, while the word Habe is applied very generally both east and west of the Niger by the Fulani to any indigenous people whom they conquered.

In the final chapters the resemblance between the architecture of North Africa and that of Djenné and Timbuctu are well shown by illustrations; in fact, the book is admirably illustrated throughout. The "Theban triad" is compared to the triple divinity of the Habe. It is shown how, after the period when Ghana was supreme, invaders from the south and east (the Sau-Sau, or Serpent claus), about 1230 of our era, over-ran the western Sudan and wiped out its former civilisation. There was a Mongol element in the invasion according to native tradition. Curiously enough, in Kano also there is a tradition of a Mongol invasion by Tettere (Tartars), and, in fact, there is a village near Kano, called Tettarawa (the Tartar village).

Lieuteuant Desplagnes appears to hold that the so-called Sudanese and West African civilisations are wholly due to Phenico-Egyptian and Lybico-Berber influences carried by successive waves of migration further and further south, a proposition which commends itself to anyone who has seen both the Sudan and North Africa.

The interpretation of the religious ideas and beliefs of the Sudan is rather to be sought in half-understood Asiatic conceptions than in any system of so-ealled "Negro" philosophy.

As Lieutenant Desplagnes himself says, there is much in his book that requires further proof. In grappling with a subject which has been hitherto practically untouched, this is unavoidable. But the book deals in a very able way with a very wide field, and, at least, so it appears to the writer, its main conclusions are unassailable. It rather suffers from the want of an index.

H. R. P.

Australasia. Gregory.

Australasia.—Vol. I., Australia and New Zealand (Stanford's Compendium of Geography and Travel). By J. W. Gregory, D.Sc., F.R.S. Second edition, rewritten. London, 1907. Pp. xxiv + 657. 20 × 13 cm. Price 15s.

The publishers are fortunate in the writers of this volume of their well-known and useful series. The first edition was written by Dr. Russell Wallace, the second is by Professor Gregory, who has the advantage of having spent some years in Australia, during which he made good use of the opportunities afforded of becoming acquainted with the country and its people. He writes clearly and forcibly, and does not hesitate to express his personal opinious even on political questions, which are much exercising the minds of politicians, colonial and imperial. In an introductory chapter on "Australia and the Australians" he explains and defends the White Australian policy and the Labour party and its ideals, and is evidently thoroughly optimistic regarding the future of the new Commonwealth.

The second chapter gives an account of the discovery of Australia, and due prominence, with a map in illustration, is given to the discoveries of Captain Cook. Then follows a history of the exploration of the continent. Wallace's account in the former edition is brought down to date, and a useful bibliography added, in which, however, the modesty of the author has not included his own interesting work, The Dead Heart of Australia.

Although this account is necessarily much condensed and is little more than a record of journeys and expeditions undertaken by successive explorers, yet it shows the extraordinary courage, persistency and endurance of the many brave men who first revealed the nature of the interior of the continent, and enables one to appreciate the panegyric of Elisé Reclus, when he says, "Et parmi les hardis conquérants de "la Terre qui ont pu mener à bonne fin l'expédition commencée, combien se "sont montré de véritables héros en exerçant toute l'énergie, toute la patience "et la force d'âme dont l'homme est capable! . . . L'histoire des explorations australiennes est de celles qui donnent la plus haute idée de la grandeur de "l'homme."

Chapters are devoted to the physical geography, fauna and flora, and the latter part of the volume treats in detail of the several states of the Commonwealth.

It is, however, the eighth chapter, of nearly fifty pages, which will interest most the readers of Man, for in it the characteristics and culture of the aborigines of Australia and Tasmania are considered. It is a very good summary of the facts and theories regarding the natives and their origin. In its clearness and freedom from bias it is particularly à propos at the present moment, when the Australian aborigines are being so much discussed by anthropologists and so much difference of opinion expressed regarding their social organisation. All the more so as coming from one who is acquainted with the country and has some first-hand knowledge of the people themselves. A remarkable tribute is incidentally paid to the late Professor Huxley. It will be remembered that as far back as 1870 Huxley gave a summary of the physical characteristics of the Australian aborigines. So thoroughly is this in agreement with what nearly forty years' additional investigation has revealed, that Professor Gregory adopts Huxley's actual words for his description of the natives to-day.

The origin and affinities of the aborigines are discussed, and Huxley's view that their nearest allies are the hill tribes of Southern India and the ancient Egyptians favoured; as also the view expressed by Wallace in the previous edition that they are dark Caucasians. The use of the boomerang, on which Huxley to some extent relied, and the use of which in Southern India has been stoutly denied, is clearly supported by facts stated by Thurston in a recent publication regarding the Maravans and Kallans.

The amiable, peaceful, and kindly disposition of the Australian natives is insisted on, and facts adduced in support of this view so different from some of the early accounts regarding them.

The Negrito-Caucasian theory of origin is rejected on the grounds of the absence of any close relationship between the Australians and Tasmanians, as shown by no pure Australian having the woolly hair of the Tasmanian, nor any aboriginal skull indicating admixture of Tasmanian blood.

The interesting and puzzling questions of the origin and affinities of the extinct Tasmanians are discussed at some length. Ling Roth's excellent summary has been used for the facts, and Huxley again called in evidence for theory; for the author evidently favours the latter's view, that the Tasmanians were Negritos who reached Tasmania from Melanesia by a string of islands, or by land off Eastern Australia, now submerged. Coming from a geologist of Professor Gregory's experience this theory is all the more worthy of attention. To quote his own words, "The general evidence "suggests that the Tasmanians travelled down the eastern side of Australia, which "once extended far out into the Tasman Sea. There is good geological evidence "that part of this land has foundered beneath the sea in times which are geologically "recent."

New Zealand forms the subject of the last chapter, but therein the Maoris receive only a very short notice. The author adopts the now generally accepted theory of a Caucasian origin with possibly some Melanesian admixture, due to the Maoris having been preceded by earlier Melanesian immigrants whom they exterminated or absorbed.

There are eighty illustrations in the text. Some of these, from photographs, are unfortunately not so clearly reproduced as could be wished. The numerous coloured maps are executed with that excellence for which Messrs. Stanford are so well known. The usefulness of the work is much enhanced by the bibliographies appended to several of the chapters and by a full index.

E. A. PARKYN.

Dress. Webb.

The Heritage of Dress. By Wilfred Mark Webb. London: Grant Richards 1907. Pp. xxvi + 393. 23 × 15 cm. Price 15s.

In The Heritage of Dress Mr. Wilfred Mark Webb has brought together a large number of facts and theories relating to the origin and development of modern garb—every-day, Sunday, and ceremonial. Coats and petticoats, sleeves and trousers, gloves and stockings, hats and shoes, cockades and baldries, and, in short, all the envelopes and appendages that our forefathers have thrust upon us, whether devised in vanity or need, are called upon to reveal the secrets of their career. Coats-of-arms, tags and pins, personal ornaments, and hair-dressing have been gathered within the wide sweep of Mr. Webb's net, whilst special costumes, such as academic and legal robes, state and court attire, military and naval uniforms, stage dresses, wedding and mourning garments, and servants' dresses, receive some measure of attention. Even the retiring nightdress is made to emerge from its customary obscurity, and we learn that at least one young lady has been heard of "who does by night what she "will not do by day, for she has given up her nightgown in favour of pyjamas."

Add to the above topics, short essays on such subjects as the dress of animals, impressions to be gained from dress, effects of clothes on the individual, the rise and fall of fashions, and dress reform, and it will be realised that the book can scarcely fail to contain something of interest even for those whose affection for their own clothes is measured by the antiquity of them. Amongst the more interesting, chapters are those on "Buttons as Chronicles," "Vestiges in the Hat," and "Cockades."

In connection with the account of the origin of the false cuff at the end of the sleeve, the author may be interested to learn that "permanently turned-up" trousers (of an exclusive design) may now be obtained in Cheapside.

Mr. Webb attacks his subject from the evolutionary standpoint, and, in fact, in his Conclusion he goes so far as to say that "the account we have given of "survivals in dress and their history shows that they in their development are "governed by the same laws as those which act on the bodies and organs of living "creatures." This would lead us vaguely to the conclusion that biology and tailoring are sister sciences. It is convenient to use the term evolution for the process of development of man's artefacts, but to overlook the fundamental dissimilarities between this and organic evolution is a confusion of thought that vitiates the analogy. It is no doubt this literal application of "Descent with modification" to the sartorial kingdom that has led the author to the conclusion that the wearing of fingerless gloves by a baby is "on all fours with" the occurrence of spots in immature animals whose parents no longer present this feature. Whatever was the form of the first gloves made by man, those now worn by babies are not suggestive of ontogenetic recapitulation, though they may be persistent types.

The statement that "there is little doubt but that they [the Eskimo] are the "descendants of the cave-men" is more than sanguine, but it scarcely carries conviction. It would be very pleasant to be able to believe that the cave-men really did follow the retreating glaciers northwards and so leave an open field for Neolithic man, but there is very much doubt.

A feature of the book is the large number of illustrations, which in most instances serve their purpose.

H. S. H.

India. Rose.

Compendium of the Punjab Customary Law. By H. A. Rose, Lahore, 1907. Pp. 105. 19 × 13 cm. Price 3 rupees.

Law in India assumes a double form—the official Brahmanical codes, such as the Institutes of Manu, and secondly, a mass of caste or tribal usage, which is independent of, and often in conflict with, the priestly legislation. In the Punjab the stability of the tribal system has given greater permanence to this variety of usage than in other provinces, and nowhere has it been collected with more skill and energy. Fifteen bulky volumes of reports by officers in charge of the periodical revision of the land revenue have already appeared. In his Compendium of the Punjab Customary Law, Mr. H. A. Rose, Superintendent of the Ethnographical Survey, has compiled a précis of this large mass of material, classified under the heads of Marriage, Inheritance, and Alienation. The chapter on Marriage contains abundant information characteristic of a very primitive social system, on endogamy, exogamy, polyandry, and similar subjects. That on Inheritance discusses the curious distinction between "inheritance by the turban," that is to say, equal distribution of property between all the sons of the deceased, and "inheritance by the woman's hair-knot," or division between the groups of sons by each wife in a polygamous family. The pamphlet contains much curious information collected by experts from the people themselves, and is a distinctly valuable contribution to the subjects with which it deals. W. CROOKE.

Canada. Fraser.

Canada as it is. By John Foster Fraser. London: Cassell. Pp. viii + 303. 20 × 13 cm. Price 3s. 6d.

The above work is the outcome of an extensive trip made by its author through the length and breadth of the Dominion in 1904. It is a book that ought to be in every library of both old and young, at home and in the Dominion. Both countries have much to learn, the one from the other; we each think we can teach without being open to instruction. This was exemplified last summer on my meeting a Canadian—paying his first visit to England—who remarked to me, "I came " over to learn, but find you can teach me nothing." Canada as it is will undoubtedly teach every reader much that he ought to know; it is a book full of information and statistics, the latter dear to the heart of all Canadians. To the intending emigrant it ought to prove of the greatest value, and should keep him from making a bad start by going out at the wrong season of the year, for Canada's winter, to those who follow an outdoor occupation, is a factor to be reckoned with, as it means a cessation of all outdoor work for at least four months.

One chapter is devoted to the red man. Great tracts of country are reserved for him, where he farms, receiving grants of money, flour, and meat from the Government. But as times goes on these reserves will no doubt become self-supporting. With all this fatherly care the natives are slowly increasing in numbers; at the present time they number about 100,000, and it speaks well for the Canadian Government that they never have had a native war. In physique the red man, as long as he remains uninfused by "fire water," is the superior of the white, of fine stature, and capable of immense endurance; he will run sixty or seventy miles a day by the side of a dog train and keep this up day after day.

The concluding chapter is devoted to sport. The Canadians are proud of the sport they can offer the European visitor. Bigger and more interesting game can be found in other parts of the world; but nowhere can the man with a gun have so exhilarating a time as in following the bear in the mountains of the west, stalking the moose in the undulating lands of the north, seeking the cariboo in the woodlands of Quebec, or shooting prairie chickens in the great flat lands which lie between Ontario and the Rocky Mountains. The book is well illustrated from photographs.

J. E.-P.

India. Gordon.

Indian Folhtales. By E. M. Gordon. London: Elliot Stock, 1908. Pp. xii + 99. 19 × 12 cm. Price 3s. 6d.

The title of this book is not altogether descriptive of its contents, as out of its ninety-nine pages only seventeen are devoted to folktales. The remainder of the book is ethnographical, and it contains a good deal of valuable information regarding the customs of certain tribes of the Bilaspur district in the Central Provinces of India, especially the Chamars. There are chapters on worship, agriculture, remedies, births and marriages, death and burial, snakelore and relics, and one chapter only, as noted above, is devoted to folktales and proverbs.

It is to be regretted that this section is not more extensive, for the stories are interesting and furnish some good variants of well-known themes. For instance, "Little Blackbird" is a story of the "cumulative" type, strongly resembling the English "Old Woman and her Pig." The tale of "Mahàdeo and the Jackal" is a remarkable example of the stories most familiar to us in the adventures of Brer Rabbit as told by Uncle Remus. The part of Brer Fox is taken by the god Mahàdeo, who plays an undignified part. There are very close parallels in this to the story of the tar-baby and to that in which Brer Rabbit detected that Brer Fox was not really dead by a simple stratagem. In the Indian story the pretended corpse does not "raise its "behime leg and holler wahoo," but testifies to the genuineness of its death in a more primitive manner.

In the ethnographical sections perhaps sufficient care has not been taken to discriminate between local customs and those which are spread all over Northern India, but the book is the result of real personal observation. M. LONGWORTH DAMES.

#### ANTHROPOLOGICAL NOTES.

THE Third International Congress for the History of Religions, which will meet at Oxford from September 15 to 18, has issued a preliminary programme.

The proceedings will begin on Tuesday morning, September 15, when the Honorary President, Professor Tyler, will introduce the President, Sir Alfred Lyall, who will deliver his opening address. The sections will then meet daily until Friday, the 18th. Promises of upwards of ninety papers have already been received.

The following are the sections with the names of the presidents so far as they are at present arranged:—

- Religions of the Lower Culture (including Mexico and Peru): President— Mr. E. S. Hartland.
- II. Religions of the Chinese and Japanese: President—Professor Herbert A. Giles.
- III. Religion of the Egyptians.
- IV. Religion of the Semites: President-Professor Morris M. Jastrow.
- V. Religion of India and Iran: President—Professor T. W. Rhys Davids.
- VI. Religion of the Greeks and Romans: President-M. Salomon Reinach.
- VII. Religion of the Germans, Celts, and Slavs: President—Professor Sir John Rhys.
- VIII. The Christian Religion: President.—Rev. Professor Sanday.
  - IX. The Method and Scope of the History of Religions.

Tickets for members (gentlemen or ladies) entitling to admission to all meetings, receptions, &c., and to a copy of the transactions, £1 each. Special ladies' tickets, 10s. each—these do not entitle the holder to a copy of the transactions. Applications for tickets, which should be accompanied by a remittance and the notification of a permanent address, should be made only to Messrs. Barclay and Co., Old Bank, Oxford.

All other communications concerning the Congress should be addressed to either of the honorary secretaries:—Dr. J. Estlin Carpenter, 109, Banbury Road, Oxford; and Dr. L. R. Farnell, 191, Woodstock Road, Oxford.

THE fourth Congrès Préhistorique de France will be held at Chambéry (Savoie) from Monday, the 24th, to Sunday, the 30th of August. A feature of the Congress will be a discussion on Lake Dwellings, and the President of the Congress, Dr. Chervin, will be glad if persons having in their possession documents, views, and objects dealing with this subject will lend them to him so that they may be exhibited at the meeting. Excursions will be made to the Savoy Lakes and also to Aix-les-Bains and the caves of La Balme and Pierre-Châtel.

All communications should be addressed to the general secretary, Dr. Marcel Baudouin, 21, rue Liuné, Paris.

THE fiftieth anniversary of the Oxford University Museum will be celebrated on Thursday, October 8th.

The Meeting of the British Association will be held at Dublin from September 2nd to 9th. The President of Section H. (Anthropology) is Professor W. Ridgeway.

Dr. and Mrs. Seligmann have returned from their expedition to the Veddas, which has been very successful.

QUARTZ IMPLEMENTS FROM CEYLON.

## ORIGINAL ARTICLES.

Ceylon.

### With Plate H.

Seligmann.

Quartz Implements from Ceylon. By C. G. Seligmann, M.D.

Plate H. represents a number of pieces of worked quartz from Ceylon, the majority from the collections made by Messrs. E. E. Green and J. Pole, who were the first to recognise that quartz fragments of the type shown were, in fact, stone imple-

ments. Such quartz implements have now been found in a considerable number of localities in the island ranging from a height of a few hundred feet above sea level to about 4,000 feet. Further, the circumstances under which they have been found suggest that they may have been in use about 2,000 years ago or somewhat earlier.

Before indicating the facts which seem to warrant this idea it will be convenient to state the places in which implements of the type figured have been found.

Mr. Green has collected them from the neighbourhood of Peredeniya, near Kandy, at a height of about 1,500 feet above sea level, and this is the place of origin of the well-

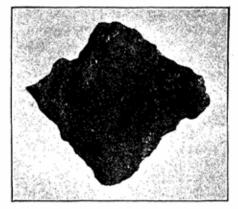


FIG. 1.

worked stone shown in Pl. H., Fig. 6. He has also found them at Pundalnoya, about 4,000 feet above sea level and some twelve miles from Nuwera Eliya. Mr. Pole has made a large collection from the neighbourhood of Maskeliya at an altitude of 2,000 to 3,000 feet, and has also found specimens near Matale. Drs. F. and P. Sarasin have recorded quartz implements from caves they explored near Nilgala village in Uva Province at a height of about 800 feet, from Kallodi in the Eastern Province, and from Kataragam on the borders of Uva and the Southern Province. The writer has found them near Bandarawella in Uva on the bare grassy hillocks called patanas at a height of over 4,000 feet, and has dug specimens from a cave, still used by Veddas, situated in the park country at a height estimated at about 500 feet above sea level in that part

of the Uva jungle known as Henebedda.



FIG. 1a.

This cave is one of two rock shelters formed by a single mass of rock; it has a well-cut drip ledge in no respect differing from those admittedly cut by Sinhalese about the time that Buddhism was introduced into the island, and two square sockets are cut in its roof resembling those discovered by Mr. F. Lewis at Nuwaragala and figured by him.\* Further, there are three steps cut in the solid rock (Fig. 2) between this rock shelter and the second cave, which is separated from it only by that portion of rock in which the steps are hewn. These steps and the upper of the two caves are shown in Fig. 2; but three other steps, which can scarcely be seen

in the photograph, exist in the rock slope between the tree trunk and the crouching dog. There is no inscription on the rocks of either of these caves, but below the drip ledge of a rock shelter used by the same Veddas, and not more than an hour's walk from Bendia Galge (as the first described caves are called), there is an inscription of which Mr. H. C. P. Bell, archæological commissioner, says, "The Brâhmi" [characters] "are of the oldest type, therefore B.C." This inscription has been read by the same authority, to whom my best thanks are due, as "(cave of) the chief . . . son of the chief Vela." There is thus reason to suppose that the Bendia Galge caves were used by Sinhalese some 2,000 years ago, and this renders the result of a partial excavation, which was all for which there was time, of special interest.

The nature of its bottom made the lower cave the easier to examine, accordingly a longitudinal trench about a foot wide was dug in the long axis of the lower cave. The first six inches yielded fragments of pottery and a number of bones, a much rusted catty, and an areca nut cutter both of the pattern in common use. A good many fragments of charcoal were found in the upper 12-18 inches, and several pieces of iron slag—perhaps six in all—as well as a number of land shells lying in groups, were found at a depth of from one to two feet. Bones and fragments of pottery continued to occur until a depth of about two feet was reached. Massive rock, which was taken to be the bed rock of the cave, was reached at about  $2\frac{1}{2}$  feet, and within a few inches of this were found many fragments of quartz—some milky, some ice-clear, some faintly opalescent, some smokey, and some amethystine. A few of these were as big as hen's eggs, the majority varied from the size of an apricot to a haricot bean, some were even smaller. From the large number of pieces of quartz—nearly 300—collected at the depth mentioned from this trench, and a small trench driven at right angles to it,



F1G. 2.

as well as from the absence of pieces country rock, there can no doubt that these pieces of quartz were brought to the site in which they were found by man. They were not waterworn, and the variety of colour

and opacity they presented make it certain that they had not weathered out in situ, in spite of the fact that quartz (but not as far as I could determine, ice-clear quartz) occurs in segregation masses in the gneissic rock of the neighbourhood. Further, when all the fragments were carefully washed and examined it was found that some 3 per cent. of the pieces of quartz obtained from this cave showed signs of working. in fact, implements similar to those shown me by Messrs. Green and Pole. Additional proof that the fragments of quartz had been brought by man to the site on which they were found were afforded by some irregular digging done in the upper caveshown in Fig. 2-formed by the same rock mass as the lower cave, and separated from it only by a few feet. The floor of this cave was so rocky that a regular trench could not be dug, but a number of holes, the largest perhaps 6 feet by 4 feet, were dug down to what was apparently the country rock at the bottom of the cave. Fragments of pottery and the bones of animals were found in plenty in these holes, but altogether they yielded only four pieces of quartz, namely, two waterworn pebbles and two broken pieces of clear glassy quartz. As in the lower cave, so in this cave, a few small pieces of slag were found some 18 inches to 2 feet below the level of the surface.

Nothing that could be regarded as a core or hammer-stone was recognised among the quartz excavated, and no pieces of chert or jasper occurred in this cave, nor have Messrs. Green and Pole found chert or jasper implements on the sites from which their collections were made. Cores, as far as my experience goes, are, in fact, not

very commonly found. Mr. Green's collection contains one excellent specimen, there are a few in Mr. Pole's collection of upwards of 1,000 specimens, and I picked up one near Bandarawella. Jasper implements were found in abundance by the Sarasins, and they collected "as many as forty" stone hammers, i.e., presumably hammerstones.\* Worked chert does, however, occur in Ceylon. Figs. 1 and 1a represent a specimen found by Mr. James Parsons, head of the Mineral Survey, concerning which he says, "It was found



Fig. 3. (1)

"at Ranchigoda, Makara District, in the Southern Province, in river-gravel under about three feet of soil. There was no more chert in the gravel, which was of white quartz. Silicified rock was found in the neighbourhood but no chert of this type." Again, while at Nilgala a large piece of stone—apparently chert—was brought to me as having been found in a river bed. This stone is reproduced in Fig. 3; it has somewhat the appearance of a broken palæolith, and is about 10 centimetres broad. A number of flakes have been struck from one surface, but



Fig. 4. (1)

its edge has not been worked. It is well patinated, and, in spite of its resemblance to the stone implement, it may be nothing more than a stone portion of a "flint and steel," such as are in use at the present day among the more backward of the peasant Sinbalese.

As regards the type of the quartz implements, there seems no good reason to consider these other than neolithic, though in Ceylon, in a recent newspaper discussion, they have been spoken of as palæolithic and even eolithic.

Fourteen of the quartz implements are figured on Plate H. Of these Nos. 1-5, 7, 10, and 14 are worked on one side only; the unworked side of Nos. 1-4 is shown in order to illustrate the well-marked bulb of percussion which distinguishes many of the specimens. The general characteristics of the instruments may be gathered from the illustration, so that a description in detail is hardly necessary. Attention may, however, be called to the three last specimens figured; of these No. 12 shows a large portion of the original crust, and appears to have been much rolled; No. 13 belongs to a type of which hundreds of examples

occur among European stone implements, and No. 14, again, has many parallels among the implements from this continent: this specimen is rather thicker than the rest, and measures 15 mm. from one face to the other.

The localities where the various specimens were collected are as follows:—Nos. 2 and 3 were collected by me at Bandarawella, No. 6 by Mr. Green at Peradeniya, No. 7 by me near Bibile, and the remainder by Mr. Pole in the neighbourhood of Maskeliya. The cores figured in the text were found respectively at Peradeniya and pear Maskeliya—the first Fig. 4



Fig. 5. (1)

respectively at Peradeniya and near Maskeliya—the first, Fig. 4, by Mr. Green; the second, Fig. 5, by Mr. Pole.

<sup>\*</sup> Spolia Zeylonica, Colombo, 1907. Vol. IV., p. 197.

From these facts it appears that at one time there must have been in Ceylon a considerable population who worked quartz, and that this people was widely distributed, extending at least from the Southern into the Central and Eastern Provinces and occupying heights varying from the low forest country of the Eastern Province to at least 4,000 feet. The material they used is refractory and does not occur in large masses. The latter factor probably accounts for the small size of the implements they produced, and also probably for the rough nature of most of them; but when the best samples of their work is examined it appears that their industry was neolithic. Whether or no the quartz workers actually were Veddas, as suggested by the Sarasins, and, as seems reasonable enough, they occupied the caves used recently and at the present day by the Veddas of Uva, and, since these caves present undoubted evidence of being used by the Sinhalese of about 2,000 years ago, it may be presumed that the Sinhalese turned the cave-dwellers out of their rock shelters, or, perhaps, peaceably occupied these, and that when the Sinhalese neglected the part of Uva in which the caves are found the cave-dwellers drifted back to them.

But the cave-dwellers of the present day are Veddas, and there is evidence that three or four centuries ago there was a strong Vedda population in the country extending from the neighbourhood of the caves in Uva to Matale in the Central Province. Taken with the inscription in Bendia Galge cave, in which the common Vedda name Nila is mentioned, this suggests that the quartz workers were, in fact, Veddas. If this be so it appears to indicate a much older and more intimate association between cave-dwelling Veddas and the Sinhalese than is usually realised, and there are other facts which seem to me to point to this conclusion.

My best thanks are due to Messrs. Green and Pole for permitting me to make free use of their collections.

C. G. SELIGMANN.

Japan. Aston.

A Japanese Book of Divination. By W. G. Aston, C.M.G.

At all times and in all countries the soothsayer has a very good opinion of himself and his office. "I am Sir Oracle," he announces to a more or less credulous public, "and when I ope my lips let no dog bark." The author of the work before me is no exception to this rule. He expects the reader "to cleause himself, rinse his mouth, "wash his hands, and raise the book three times reverently to his forehead before he opens it." He must not put it down on the bare mats but on a pure stand with a sheet of paper under it. I am afraid my copy has not been always treated with such reverent care. It is soiled, worn, and dog's-eared. A more serious matter is that of the two volumes of which it consists one is missing. Nevertheless a sufficiently clear idea of its general scope and character is to be obtained from what is left.

Divination is of two kinds—the religious, as the Delphian oracle, and the non-religious, exemplified by our chiromancy. In the present work we find a combination of both principles. It has a non-religious basis, which is fortified by the addition of various religious elements. The non-religious principle is that universally recognised in the casting of lots, viz., a belief in the virtue of mere chance. The necessary mechanism consists of a set of 100 divining sticks resembling chopsticks. They are about 6 or 7 inches in length, and each bears a number with an inscription in the Chinese character signifying "Great Good Luck," "Small Good Luck," "Bad Luck," "Ultimate Small Good Luck," or "Half Good Luck." The lucky numbers greatly preponderate. These sticks are placed in an oblong box measuring 12 by 4 by 4 inches. It is closed on all sides except for a small hole at the end, which allows only one stick to come out at a time. I have seen a box of this kind which was provided for the use of visitors to a Buddhist temple at Ishiyama, near Otsu. It contained twelve sticks only. On drawing one the consulter of the oracle received a slip of paper

bearing a number corresponding to that of the stick, and inscribed with a verse of Japanese poetry, indicating vaguely enough his future fortunes. There were no religious concomitants beyond the circumstance that the drawing took place in a temple. The present case is widely different. Here we meet with religion at every step. The title of the book, Kwannon Hiakusen (Kwannon's hundred divining sticks), shows that it is under the patronage of the Chinese Buddhist deity of that name. The preface relates a legend of its introduction from China in the tenth century by a Buddhist dignitary. The practitioner of the art is directed to read a certain Sutra and to repeat "the true words of the eleven-faced, thousand-handed true Kwannon 333 times, "making 33 obeisances." He should have previously cleansed himself and brought his mind and body into unison, putting away from him all doubt. Then follows a long prayer (there is no trace of any compulsion of gods or spirits) to Kwannon to grant a true divination, and a set of Dharanis (invocations in the Sanskrit language). After these preliminaries he should raise the box reverently three times to his forehead and shake a stick from it.

Two pages of the book are allotted to each stick. A stanza of four lines of Chinese poetry occupies a conspicuous position, and is referred to as the truly authoritative part of the work. This feature has every appearance of a Chinese origin and is probably very much older than the Japanese expansion, which latter, in the absence of more precise information, may be assigned to the latter part of the 18th century. The Chinese verses are rather cryptic and contain no appreciable religious element. The first stanza, corresponding to a stick marked "Great Good Luck," runs as follows:—

The pagoda, built of the seven precious things, Rests on the summit of the high peak; All men look up to it with awe, Let there be no neglectful glances.

Here is a foreboding of ill luck :-

The household path has not reached prosperity, But is exposed to danger and disaster, Dark clouds obscure the moon-cassia-tree, Let the fair one burn a stick of incense.

The real business of prophesying begins when the Japanese author proceeds to give definition and substance to the misty generalities of his Chinese text. According to him the first of the above-quoted verses implies that the person who draws the corresponding stick will, if a Samurai or retainer, receive great promotion and be made a general or a captain. He will be envied by his comrades and find favour in the eyes of his lord. But imprudence may lead to disaster. The Buddhist priest will become an incumbent of a temple, or will be granted official rank. He will find liberal patrons or obtain a good chief image. A woman will marry above her station, or if she is already married her husband will have a sudden rise in the world. She will have clever male children. Employés will do their duty towards their masters, and will become foremen or will get gain. Pupils will share the prosperity of their teachers. But if they are not careful evil results will follow. Let there be no negligence. Merchants will find a sale for their goods in desirable quarters, and will be greatly favoured, gaining much money by their influence. But if they go too far the unexpected will overtake them. If a nobleman's yashiki is their regular customer they will receive great good fortune from it. Similar good fortune is predicted for players and peasants. The sick man will recover, but his illness will be a long one. Prayer and a good doctor are recommended. The person who is expected will arrive, though somewhat late. The lawsuit will be decided favourably. The lost article will be found after a time. In quarrels and disputes there will be victory. The time is good for building a house, for a removal, for shaving a boy's head (on reaching puberty), for a marriage, and for starting on a journey. Buy freely, there will be great profit soon.

The drawer of the unlucky No. 5 will, if a Samurai, be unfortunate if he does not exercise the greatest self-restraint. The Ronin will find no opening for employment. The retainer will be discharged, or at least be reproved by his chief. But if he is patient all will come right in the end. The Buddhist priest will remain in studious penury. He may be a man with a future before him, but he will meet with misfortune. But if he perseveres, avoiding greed and revering the Kami and Buddhas, all will be well in the end. A woman will make a bad marriage and find everything unsatisfactory. She will be unable to rear her children and will soon become a widow.

These are the commonplaces of the soothsaying fraternity everywhere. A greater interest attaches to the counsels given to the consulter of the oracle as to his religious conduct. They afford an insight into the state of religion in Japan at this period, especially among the lower classes of the population. The author himself was not much of a scholar. He was probably a Buddhist priest, but the deities whose worship he recommends form a very heterogeneous assemblage. They comprise the Buddhas, the gods of old Indian myth, certain gods of Chinese origin affiliated to Buddhism, the "Heaven" of Confucius, and the deities of Shinto. The tolerance or laxity which permits and even enjoins the practice of such conflicting forms of faith is not peculiar to our author. It is characteristic of the nation to which he belongs. The fundamental unity of Buddhism, Confucianism, and Shinto is a favourite theme of Japanese writers on religion.

It may be observed that whether Buddhism, as taught by its founder, is or is not an atheistic religion—if there be such a thing—the modern Buddhism of Japan has plenty of deities. Besides such extraneous gods as Kwannon, the Buddhas themselves are regarded as Kami. This very treatise associates these two classes of deities frequently under the term Shimbutsu (Kami and Buddhas) as objects of a joint adoration.

Each section of the book has a clause in which the drawer of the number to which it belongs is recommended a selection of one or more gods in which he should put special faith. Among these two are much the most prominent, viz., Kwannon and Tento. Kwannon, according to Eitel's Chinese Buddhism, is "a Chinese female "deity, probably an ancient local goddess of mercy, worshipped in China before "the advent of Buddhism under the name Kwanyin, and adopted by Buddhists as " an incarnation of Avalôkitês' vara (or Padmapâṇi)." She is very popular in Japan. Tento or tendo is a word of Chinese derivation, and means Heaven-path. Originally it was no doubt substantially equivalent to Ten, Heaven, which in China fluctuates a good deal between "the material sky," "Nature," "the eternal principle of right,"\* Perhaps "Law of Nature and Right" represents the idea which the more highly educated Japanese attach to Tento. But this is much too abstract for the unenlightened vulgar to whom this book is addressed. To them Tento is the sun --not merely the actual sun in the sky, but the material sun, considered as a living penny, possessing moral attributes, hearing prayer, punishing vice, and rewarding virtue. That there is a definite personification of Tento as the sun is shown by the fact that it has usually the respectful particle o prefixed to it, and the word sama (Sir) appended. Especially in the mouths of women and children the sun is at this day O-Tento-Sama, the more philosophical meaning of the word being wholly unknown to Though Tento is to some extent anthropopathic, it is not anthropomorphic. It has no sex, no myth, no temples or idols, and no priests for its service. It is nevertheless a popular divinity, marking a reversion to a more primitive and concrete conception of deity. One of the illustrations in the Book of Divination shows a

<sup>\*</sup> Compare the Greek nomes, which was also deified.

Japanese in ceremonial costume kneeling in the open air in front of his house with a small table before him on which is burning a stick of incense in honour of Tento. The sun is seen breaking from behind a mass of cloud (Fig. 1).

The drawers of other numbers are counselled to put their trust in the sun (hi) and moon (tsuki) sans phrase, and to follow the custom of sitting up at night ready to greet the rising of the luminary with devout prayer and obeisance.

Shimmei (divine splendour) is frequently mentioned. This term sometimes includes the whole pantheon of Shinto deities. It is, however, more especially used of the two great gods of Ise, viz., the sun-goddess and the food-goddess, and may even be restricted to the sun-goddess only. Probably it is in this last sense that we are to understand it here. To the modern Japanese, Tenshōdaijin (the sun-goddess) no longer suggests the sun. They do not identify her with Tento. To them she is the mighty deity of Ise, the ancestor of the Imperial dynasty and the Great Providence that guards Japan.

Ji-matsuri (earth-worship) is recommended in connection with the building of a house. This is a primitive form of worship. The earth is the ground itself. It is not in the least anthropomorphic, and but faintly anthropopathic. It has no sex, and being a concrete object itself, has no need of an idol or other material token of the presence of divinity.

Hachiman is a very popular god in Japan. He is now recognised as a god of war, but his real origin and functions are unknown. He partakes of the character of a Shinto and a Buddhist deity.

Benten, or Benzaiten, one of the Japanese "seven gods of good-fortune," is a female deity of Indian origin.

Bishamon (Vaisramana), another of the same group of deities, is one of the Tchatur Maharaja or "Four Heavenly Kings" of Indian myth.



FIG. 1.

It is doubtful whether Daikoku, also a god of good fortune, is of Indian or Shinto origin.

Fudō and Marishiten are Indian deities who have found their way to Japan in company with Buddhism.

Atago, the Shinto god of fire, is recommended for worship in some cases.

The Ujigami is the patron Shinto deity of a man's birthplace.

Kōshin is a deification of that day of the month which corresponds to the fifty-seventh term of the Chinese sexagenary cycle.

In addition to the worship of the particular deities above enumerated, our author enjoins on his clients the adoration of the Kami and Buddhas generally. He also advises them to read the Daihanya, a collection of sixteen Sutras expounding the philosophy of the Mahayana school.

Ancestor-worship is nowhere mentioned.

The term shinriki (divine power) occurs frequently in this treatise. The standard native dictionary, the Kotoba no Idzumi, says that this word is a contraction for shintsūriki (divine penetrative or pervasive power), which is defined as "the power of unconditioned action like that of the gods, such as to pass over the clouds

" (levitation), to raise the wind, to ride on a crane or dragon." To this may be added the power of making oneself invisible. There is a story of a possessor of this faculty, who, on one of his aërial flights, allowed his gaze to rest too ardently on a pretty girl, who, with her skirts tucked up, was trampling clothes in a wash-tub by a river side. He lost his tsūriki, and tumbled down to earth in consequence. Our author's shinriki is different from this. In cases of illness he frequently advises the patient or his friends "to take shinriki" or to raise up shinriki, and pray to Tento or to the Kami and Buddhas. Here shinriki is evidently that power which is invoked in faithhealing, still practised in Japan by some Shinto sects. Shinriki will do more than this. After enumerating the difficulties portended to a merchant who has drawn the doubtful number forty-one, our author adds, "But if the Buddhas and Kami are prayed to with " shinriki, there will be some alleviation." Under another number a Buddhist priest is advised to practise secret good works with shinrihi. Again, we are told that "shinrihi " will be useless without a protector." May we not translate shinrihi simply by "faith"? As used by our author, it is plainly something more than the miraculous powers which the Japanese, in imitation of the Chinese Taoists, attribute to their magicians. We are here on the margin of that borderland, the X-country for which we are still in expectation of a guide to tell us

> "Quid possit oriri Quid nequeat, finita potestas denique cuique Quanam sit ratione, atque alte terminus haerens."

More than once the consulter of the oracle is advised, in case of sickness, "to "have recourse to a great doctor and a kitōja" (professional prayer-man); as we might say, a consulting physician and a Christian Scientist. At Osaka, many years ago, my attention was drawn to a droning sound which proceeded from the servants' quarters of our consulate in that city. On enquiry, I learned that a kitōja was reciting prayers for the recovery of a sick man. The result was a failure. Perhaps the officiating person had not sufficiently realised that a stricture was unlikely to yield to this mode of treatment. Our own kitōja sometimes make similar mistakes.

There is an abundance of excellent, if rather obvious, advice in this treatise, and a high moral tone reigns throughout. Thus an artisan who has drawn the unlucky No. 7 is advised, if he would avert the calamities predicted for him, to keep an honest heart, to be patient and prudent in all things, and to put his faith in the Kami and Buddhas. We frequently meet with the proviso that if a wicked man draws a good number it will be of no use to him. Things will in his case turn out quite different from the predictions. The sick man who draws a lucky number will recover; if he is a bad man he will die. If the merchant has two concubines in addition to his proper wife, he will have a succession of misfortunes. The priest who forgets his vows will lose his living and become a wanderer. The Samurai who is infatuated for women will be disgraced, but he who practises bushido (the rule of conduct becoming an officer and gentleman) zealously will receive promotion. In cases of life and death, the coward will die, while he who grudges not his life will save it. Prudence, patience, and circumspect conduct are frequently inculcated. Cowardice, greed, injustice, and indolence will nullify the advantages portended by a good number. In quarrels you will win if you have right on your side, otherwise you will be beaten.

Is it uncharitable to suggest that, in addition to the satisfaction which he derives from his ex-cathedra position as a teacher of high morality, the soothsayer is not sorry to provide himself with a loophole of escape when the event is in too flagrant contradiction with his prophecies? In case of complaint he can always throw the blame on the unsatisfactory moral condition of the complainant.

W. G. ASTON.

Africa, South.

Haddon.

Copper Rod Currency from the Transvaal. By A. C. Haddon, Sc.D., F.R.S.

A remarkable form of copper currency appears to be restricted to the north-east of the Transvaal, of which, so far as I am aware, only two specimens have reached this country. One specimen was obtained through the courtesy of the Director of the Transvaal Museum, Pretoria; this I gave to Professor W. Ridgeway: it came from Pallaboroa, Haenertsburg District, Zoutpansberg, Northern Transvaal. For the other I am indebted to Mr. H. D. Hemsworth of the Transvaal Civil Service, who with great difficulty obtained a specimen also from Pallaboroa. This specimen is now in the Horniman Museum.

Fig. 1.

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Each specimen consists of a straight rod of copper about 49 cm. in length, with an average diameter of 13 mm. One end is attached to the rounded apex of a flattened, oval, conical projection, the plane of which is set a little more than a right-angle to that of the rod. In the first specimen (Fig. 1) four root-like bars, 34 mm. in length, project from near the upper or basal end of the cone. At one end there is one bar, at the other there are two close together, and the fourth arises from the surface facing the rod. In the second specimen (Fig. 2) two similar bars, 32 mm. long, spring from close to the end of the long axis of the base of the cone; about 17 mm. below those are two other rods, one 28 mm. long, and the other 7 mm. Both castings are rough, especially at the base of the cone.

I saw several other specimens in the museum in Pretoria which exhibited great diversity in the number and arrangement of the root-like bars.

It is evident that the flattened cone is simply the cast of the funnel into which the molten copper was run when making the rod. The rod is the essential portion, but it appears that for currency purposes the natives like to utilise the whole casting. I confess I do not understand the use or significance of the root-like prolongations from the cone.

Mr. Hemsworth drew my attention to certain peculiar markings on the rod he obtained for me. Beginning about 75 mm. from the cone end are some ten imperfect raised bands, and running down each side of the rod is an indistinct groove; the latter can also be discovered in the other specimen. Mr. Hemsworth suggested that the bore for the casting of the rod was made by covering a reed

FIG. 2.

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over with earth, and that, in his specimen, the reed having been split, the coppersmith had bound it round with bands to keep it in proper shape. This explanation appears to be perfectly satisfactory.

In the Zoutpans district the name of the currency is marali (sing. lirali), and it was employed chiefly for the purchase of brides by the chiefs. Mr. Hemsworth estimates that the value was at one time about ten cows. The value of the first specimen was estimated at two cows and three goats; doubtless the exchange value is dependent upon the current price of cattle. Probably we may regard this currency as the exchange value of a wife, but the number of cattle to which it would be equated might vary according to the temporary value of the cattle.

Mr. G. W. Stow, in his admirable book The Native Races of South Africa (1905), figures (p. 518) three copper castings of the Magaliesberg Bakuena, found near some old copper workings in the Transvaal. He says they appear to have been a madula or phallic charm. From his illustrations they seem to be simply the casts of the funnels used for making copper rods, the broad flange, which he takes to be a separate casting, being merely the overflow of the molten metal on the surface of the ground around the edge of the funnel. If this view be correct fourteen to twenty-five rods could be cast at the same time. Perhaps the root-like appendages described above may be simply the vestiges of similar castings; a long thick rod was all that the smith needed, but as other castings had numerous rods it is possible that he thought his funnel should have them too. There is no evidence that these abortive rods were ever any longer than they are at present, as they present the character of an untouched casting. A. C. HADDON.

### Africa, South.

Hemsworth.

Note on Marali Currency. By H. D. Hemsworth.

I have seen a specimen entirely without the root-like bars, so I imagine that the bars were not a feature of much importance.

I have not heard of any marali being used during the present generation in connection with marriage. Old natives have told me that one lirali and 20 hoes would possibly have been given for a wife in the same way that cattle, goats, and money are now given. As marali are (possibly on account of their rarity) apparently no longer used as a means of exchange, it is difficult to estimate their value. As a rule the owners, when they are to be found, will not part with them at any price, unless in immediate need of money, as when their taxes become due. occasions they will accept whatever is offered, provided the amount is sufficient for the needs of the moment.

If one lirali and 20 hoes was the value of a girl, a lirali would have been at that time (some fifty years ago) equivalent to ten cows, or say 201. At the present time a lirali is of very little, if any, value to any native but the owner, who, as I have said, will not part with it except when pressed for money.

The marali seem to be regarded more in the light of heirlooms—of value only to the families who possess them. There may also be some magic or "medicine" associations which might account for the reluctance of the owners to sell them or explain anything about them.

Pallaboroa, the only district in which, as far as I know, they are to be found, is about midway between the village of Leydsdorp and the nearest point of the border of Portuguese East Africa and the Transvaal. This country abounds with big game and, before the cattle disease known as rinderpest appeared in the Transvaal, was infested with tsetse fly so that cattle could not live there; the absence of cattle might explain the necessity for some other form of exchange in marriages; this necessity would have disappeared when, after the appearance of rinderpest, it was found that the fly had disappeared and cattle and other stock could live.

The disuse of marali might also have been caused by the output coming to an end through a dearth of men skilled in their manufacture. This may have been the case, as it is a known fact that the tribes, amongst whom these rods are found, have dwindled very considerably in numbers owing to intertribal wars, raids by the Swazi, fever, and famines, particularly the famine of 1896, which was caused by the damage done by immense swarms of locusts followed by a drought.

I do not think there is any doubt that the copper ore was obtained from the old workings to be found at Pallaboroa. H. D. HEMSWORTH.

### REVIEWS.

Celebes.

Sarasin.

Versuch einer Anthropologie der Insel Celebes. Zweiter Teil: Die Varietäten des Menschen auf Celebes. Von Dr. Fritz Sarasin. Materialen zur Naturgeschichte der Insel Celebes: v Band., ii Teil. Wiesbaden, 1906. 22 plates and 20 figures in the text. Pp. viii + 162. 32 × 35 cm.

The most interesting results of the important investigation of Dr. F. Sarasin on the anthropology of Celebes are those which deal with the Toála of the district of Lamontjong, South Celebes; other Toála live in the district of Maláwa, north of Tjamba, and probably in the mountain district of Lamúru. Belonging to the Toála stock are the Tomúna and Tokéa, but they are more mixed than the former. These people of the woods, as they are termed by the settled natives, are frequently enslaved by the Bugi. The average stature of 11 Toála men is 157.5 cm., and for 8 women 147.7; the range for the men being 151.2-165.8 cm., and for the women 138 · 5-156 cm. Their skin colour is darkish brown and occasionally red-brown, the women being usually a little lighter than the men. The eye colour is a beautiful brown. The hair is always black in colour, and when uncut falls to the shoulders in the men; as a rule that of the women is longer and is usually tied in a knot. The hair is cymotrichous: one had flat wavy hair, in 19 it was very wavy, and in 7 it was markedly curly. The latter character seems to be more characteristic of the Toála of central Celebes, but it is not more curly than that of many Australians, and does not approach real ulotrichous hair. When it is allowed to grow there is a fairly long growth of hair on the face. Twenty-six men of the Toála stock had an average head length of 179 · 7 and a breadth of 146 · 8, the head index being 81 · 7; the average index of 15 women being 82 · 3. The average index of 10 Toála men is 80 · 4, the range being 75.3 to 85.5, that of 6 women being 83.8 (76-89.3). Despite the preponderance of brachycephaly, Dr. Sarasin believes that a moderate mesocephalic head form is characteristic of the Toála stock. Out of 27 of the Toála stock 19 had the superciliary arches and glabella but feebly developed, though it was very strongly marked in 8.

The numbers are fairly evenly divided between chamæprosopy and mesoprosopy: there are no leptoprosops. The most characteristic facial feature is the nose. Unfortunately Dr. Sarasin neglected to take measurements in the field and had to rely on measurements of photographs; they appear to be strongly platyrhine ("Chamärhine"). The root is generally broad and sunken. In profile the nose is usually concave, rarely straight, and still more rarely slightly convex. The lips are thick, especially the lower one. The chin is usually retreating. The eyes are straight, and though a small epicanthal fold may be present the caruncula is never covered.

Allusion was made in Man (1906, 98) to the discovery and investigation of Toalá caves in Lamontjong by Drs. P. and F. Sarasin. The implements were mainly made of quartzite and were formed of flakes, which were chipped on one side only. They consisted of single and double-edged knives, scrapers, borers, lance-heads, and arrow-points with serrated edges. The latter are of especial interest as the bow is almost unknown in Celebes. The artefacts, human and other animal bones demonstrate the existence in the past of troglodytes of small stature and primitive characteristics who used stone implements, had bows and arrows, were hunters and collectors, but had no domestic animals, except, perhaps, a dog. The authors have no hesitation in regarding these people as the ancestors of the Toála, and propose the name of "Urtoála" for them. It might have been better if they had been introduced to science as the "Proto-Toála," thus avoiding the combination of a German with a native word.

Dr. Sarasin's comparison of the Toala with the Veddas is very instructive. The

stature of the men and women of both peoples is practically identical; they are small, but not of pygmy proportions. The skin colour of the Toula is lighter than that of the Vedda. The hair of the head is very similar, though that of the Veddas is slightly longer; very similar is the face hair, though somewhat more strongly developed in the Veddas. The face in both is short and broad. The superciliary arches and the glabella are more frequently prominent in the Veddas. The sunken root of the nose, its concave profile and broad wings are common to both. The coniform projection of the The chin is more retreating in the Toála. lips occurs in both. Among the most important differences are the head-form, the Vedda being delichocephalic and the Toála stock meso- and brachycephalic; 17 male Vedda skulls from the interior were strongly delichocephalic, averaging 70.5, whereas 7 skulls of male coast Veddas had an average of 76.5, and one living person had 79. The proportions of the body are also different, especially relative length of the extemities, the arms of the Veddas being longer in proportion to the stature.

The Senoi (Sakai) of the Malay Peninsula, according to Martin, resemble both groups in many characters, but they are shorter—149.5 to 154.8 cm.—than either. The skin colour somewhat resembles that of the Vedda, and the hair is very similar, but has a reddish tinge and is coarser and stiffer. The head index ranges from 76.4 to 80. Annandale and Robinson also give an average index of 78.3. The superciliary arches and glabella are very rarely at all prominent. The face is broad and the nose mesorhine bordering on platyrhine.

The evidence clearly points to a community of race between these three peoples. Dr. Sarasin also seeks for traces of this stock elsewhere, and thinks it may be found in the Kubu of Sumatra, and perhaps among other peoples. Neither Java nor Borneo have yielded examples of this race; unless, as Dr. Sarasin maintains, it is represented by the dolichocephalic (75.5) Ulu Ajar of Borneo, who are also darker than their neighbours; but Dr. Nieuwenhuis sees no reason why they should not be of Indonesian stock. Too little is known of the ethnology of the other islands for anything definite to be stated.

According to Dr. Sarasin's investigations there is now no trace of a Negrito or of a Papuan race in Celebes, although he admits that the Papuans, at all events, probably passed through the island.

To the Toradja stock belong the great mass of the inhabitants of Celebes: most of them are still heathens, though some are slightly influenced by Islam. In the southern peninsula are the Bugi (Towugi) and Makassarese states, with a monarchical-feudal system, whereas the heathen Toradja enjoy a patriarchal government. The following are included in this stock:—(1) the Toradja of the district of Paloppo, (2) the Topebato and allied tribes, (3) the mountain tribes of western Central-Celebes, especially the Tokulawi and Tobada, (4) the stems of the south-eastern peninsula, especially the Tomekongka and Tololaki, (5) the Bugis and Makassarese, (6) the Gorontalese.

The following is a summary of their physical characteristics. Stature: Tome-kongka, 156 4 cm.; Gorontalese, 159 8 cm.; Toradja, 159 8 cm.; Bugis and Makassarese, 162 cm. The skin has usually a light-brown colour, which is astonishingly light in the Bugis and Makassarese. The hair is wavy to straight; all are lissotrichous. The head-index is distinctly brachycephalic, Toradja, 81 3; Tomekongka, 83 8; Bugis-Makassarese, 83 3; Gorontalese, 83 8. The face form of perhaps half of the Toradja is short and broad, while a beautiful and fairly high oval face, which is frankly mesoprosopic, greatly preponderates among the Bugis and Makassarese. Nasal index: Toradja, 97 8; Tomekongka, 90 3; Tololaki, 86 8; Gorontalese, 86 6; Bugis-Makassarese, 85 65. The profile of the nose is generally straight or slightly convex, rarely concave; the bridge is moderately high, and the root scarcely sunken. The Bugis-

Makassarese, who have mixed most with foreigners, are the highest type; they have the tallest stature, lightest skin colour, broadest head, longest face, and narrowest nose. Next to them are the Tololaki and Tomekongka. The men of Minahassa have an average stature of 164.7. The skin colour is a very light clear brown to yellow. There is little hair on the face. The face is a beautiful oval, but shorter and broader in the women. The root of the nose is never sunken, with great breadth between the eyes: the profile is straight, rarely concave in the men, though usually so in the women. The eyes of the men frequently, and the women always, have a Mongolian fold more or less developed.

Dr. Sarasin discusses most of the previous literature dealing with the racial elements in the East Indian Archipelago. Some authors have endeavoured to prove the existence of a dolichocephalic or mesocephalic (mesaticephalic) race, to which they would assign the term Indonesian, and a brachycephalic race, of which the true Malays are a branch. If this be granted there are, so far as is known, no Indonesians in Celebes. Dr. Sarasin is in favour of the view that the inland "Indonesian" stems are characterised by a high mesocephaly or low brachycephaly (but he appears to underrate the marked dolichocephaly of some peoples), and the Malayan mixed stems by a low to strong brachycephaly. He calls the whole population, excepting the Toála, the Malayan stratum ("Malayische Schichte"), but not divisible into Indonesians and Malays, though he proposes to distinguish a proto- or true Malayan stratum and a secondary or mixed Malayan stratum ("deutero- oder misch-malayische Schicht"). To the former stratum belong the "prototypus" of the Malays, in which are included the Battak, Dajak, Tenggerese, Igorrots, etc.—(he does not, however, define what people in Borneo he means by Dajak). To the latter stratum belong the coast Malays and the mixed peoples of the Archipelago. He allocates the Toradja, Bugis, and Makassarese, the inhabitants of the interior of the northern peninsula, the Gorontalese of the interior, and the Mongondower, and the original natives of Minahassa to the "Proto-Malayan stratum," and the coastal tribes, including some of the Bugi Makassar and Gorontalese, to the "Secondary or Mixed Malayan stratum." The root of the whole proto-Malayan stratum is to be sought for in Further India at a time when there was direct communication by land. Later came the sea-faring trading people from the western part of the archipelago, Malays from Malakka and Sumatra, Javanese, finally Arabs, Chinese, and Europeans. This product is the Secondary or Mixed Malayan ring which encircles the coast of Celebes. Probably no one will dispute the validity of this latter group, but it does not appear to the present writer that the last word has been said. Dr. Sarasin deserves great credit for having "dissected out" a Vedda-like element in the population, though I cannot but believe that there is yet another element with a marked tendency to dolichocephaly in Indonesia, which is insufficiently recognised by Dr. Sarasin. I refer here more particularly to the Muruts and other tribes of Sarawak ("Sketch of the Ethnography of Sarawak," Arch. per l'Anth. e l'Etnol., Vol. XXXI., 1901, p. 341) and to the Ulu Ajar of Netherlands Borneo (cf. Man, 1905, 13). The thanks of ethnologists are due to Dr. Sarasin for this most admirable monograph and for the numerous excellent plates illustrating racial types. A. C. HADDON.

Folklore. Gomme.

Folklore as an Historical Science. By George Laurence Gomme. London: Methuen & Co., 1908. Pp. xvi + 371. 15 × 23 cm. Price 7s. 6d.

The problem how best to utilise tradition in the interests of history has occupied the attention of Mr. Gomme for many years. In earlier works, notably in The Village Community in Britain and in Ethnology in Folklore, he had argued very strongly in favour of the possibility of discovering an ethnical element in folklore and of attaining important historical conclusions by analysis and comparison of traditional stories, ritual,

and institutions. In the present work he returns to the attack. Protesting against the contempt by historians of the evidence of tradition and equally against the neglect by students of folklore to carry their researches into the ethnical field and correlate them with those of professed historians, he endeavours to show how such researches may be

applied to British history.

Let me at once say that the distinguished author has produced one of the most suggestive works on folklore that have appeared for many years. No one reading it can fail to be impressed with his learning and eloquence, with the intensity and glow of conviction which animated his pages, and with the admirable points he makes repeatedly in the course of the argument. If we reserve our judgment it is largely because much of the detailed proof is not yet before us; it is to be embodied in a further work on tribal customs on which he is known to have been engaged for some time. Pending the appearance of that work, therefore, criticism can only be diffident and tentative, and the few observations I am about to offer are made in that spirit and in the hope of directing the author's attention to one or two difficulties arising upon the consideration of his arguments.

It is one of the merits of the book that every chapter opens a vista of new questions. I must therefore severely curb my inclination and concentrate my remarks upon a single subject. But it shall be a subject of capital interest to anthropologists. Mr. Gomme has dared to propound one more theory of the origin of totemism. He analyses the constituents of totemism and comes to the conclusion that its origin is to be sought in the relation between the individual members of the totemic group and the totem. He finds it in "the industrialism of early woman, from which originated the " domestication of animals, the cultivation of fruits and cereals, and the appropriation " of such trees and shrubs as were necessary to primitive economics. The close and " intimate relationship with human life which such animals, plants, and trees would " assume under the social conditions which have been postulated as belonging to the " earliest stage of evolution, and the aid which these friendly and always present " companions would render at all times and under most circumstances would generate " and develop many of those savage conceptions which have become known to research." In short, totemism would arise from the connection imagined between a woman's children and the friendly animal, plant, or tree.

Now I am entirely at one with him in thinking that" totemism has not come to man " fully equipped in all its parts. It is, like every other human institution, the result " of a long process of development, and the various stages of development are " important parts of the evidence as to origins." It is probable, too, that "at the " beginning it was not connected with blood-kinship and descent," or with any system of marriage. At the same time it must be pointed out that if we are to look for its origin in the domestication of animals and the cultivation of fruits and cereals, we should expect to find domestic animals and cultivated plants bulking largely in the list of savage totems. But this is precisely what we do not find. These objects are rarely totems, and I think never in savage communities, for the very good reason that the domestication of animals and cultivation of plants are not industries characteristic of the lowest stage of culture. Moreover, I have grave doubts whether, in assigning (if I rightly understand him) the origin of totemism to the imagined association between the totem and the individual children Mr. Gomme is not overlooking the solidarity which forms so powerful an influence over peoples in the lower culture. The group may be large or small, but save, perhaps, in the case of outcast peoples driven into waste places and decimated by persecution and want, we find everywhere groups, and the members of those groups entertain towards one another the most intimate feelings of community. Mr. Gomme, indeed, recognises this in another part of his argument. "Early man," he says, "does not live individually. His life is part

"of a collective group. The group worships collectively as it lives collectively." But if so, can totemism have had an individualistic origin? The groups referred to are not the primitive group of an adult male with his wives and impubescent children postulated by Mr. Lang. They are wider; they are organised in a different manner. Mr. Lang's primitive group seems to me not only unsupported by evidence, but improbable; and I regret that Mr. Gomme, who has so vigorously criticised some of Mr. Lang's speculations, has not gone a step further and challenged this one. It is in effect based on the presumed universality of masculine jealousy, and masculine jealousy is anything rather than universal. If the harem-group (as I may call it) had been primitive it is very questionable whether humanity would have survived in the struggle for existence, or at least whether it would have become the predominant power that it is. The harem-group is individualistic in its tendency, as we find among the anthropoid apes and the larger Felidæ, where it is formed of a single pair and their immature offspring. Such individualism would have been fatal to humanity.

Passing to Mr. Gomme's application of his principles to the investigation of British folklore, he argues powerfully, and I think successfully, that remains of totemism are to be discovered. But these remains are, he tells us, remains of kinless peoples; that is, peoples not organised on the tribal system. If I understand him rightly, tribal organisation was based upon kin, and so far as the British Isles were concerned was confined to the Aryan-speaking immigrants. The earlier inhabitants were not organised on the basis of kin. But totemism, wherever we find it fully developed in modern savagery, is a part of the organisation of a people organised upon the basis of kin. We may therefore presume that the remains of totemism discoverable in the British Isles, though now, of course, disintegrated and to a large extent divorced from kinship, descend to us from a people or peoples recognising kin and organised on that basis. Mr. Gomme, I gather, thinks otherwise and excludes the Celtic and Teutonic invaders from the totemistic populations; they were organised on the basis of kin, and blood-kinship is the foe of totemism and ultimately destroys it. Even so, however, they had probably passed through the stage of totemism, and we cannot deny the possibility, or, indeed, the probability, that vestiges of that condition Animal names, for instance, are reckoned by the author among vestiges that often remain long after totemism has ceased to be an effective system. adduces quite properly animal names among the Irish and Scotch as evidence of former totemism. How can we be sure that this former totemism is to be assigned exclusively to the non-Arvan population absorbed or subjugated by the Arvan-speaking invaders? The difficulty is increased when we turn to the Anglo-Saxons and find animal names (Hengist, Horsa, and names compounded of wolf, to mention only those that occur at once to the mind) and animal symbols rife among them. If such names and symbols among the Celtic-speaking populations be vestiges of totemism, are they not vestiges of totemism also among the Anglo-Saxons? To grant this, however, is to admit that we cannot derive the remains of totemism found in the British Isles from the pre-Arvan population exclusively. Such a stratification of folklore is impossible.

But though I thus find myself unable to subscribe to certain of Mr. Gomme's conclusions upon the evidence he has brought forward, I must emphasise the fact that a large part of the evidence is not yet before us. The present work may be regarded as an introduction to the greater work that is behind. It is necessary as giving a preliminary general view of the author's position and preparing his readers for the fuller working out of his proofs hereafter. Independently of this, it contains valuable criticisms of many existing theories. It is a timely and earnest assertion of the historical value of an important branch of anthropology; and among the services it renders is

the insistence on the importance of the economic forces which played their part in the evolution of human society: forces too often lost sight of in anthropological speculation.

E. SIDNEY HARTLAND.

## America, North-West.

Smith.

Archæology of the Gulf of Georgia and Puget Sound. By Harlan I. Smith [edited by Franz Boas]. The Jesup North Pacific Expedition. Vol. II., Part VI., pp. 301-441. Memoirs of the American Museum of Natural History, New York City, 1907.

In this memoir is given the result of several seasons' work along the shores of Puget Sound and the Gulf of Georgia. During the course of the exploration, which was started in 1897, many sites were visited and partially examined, many shell-heaps were discovered along the coast; but none appears to have been thoroughly explored. The paper is particularly valuable in recording the numerous archæological sites occurring in that region.

Few, if any, new types of objects are described or figured and the material discovered in the shell-heaps does not appear to have been of unusual interest or value; but the work was undoubtedly carefully done and the memoir is a welcome addition to the literature of the north-west coast.

Among the more interesting specimens figured is a serpentine celt, in an antler socket, which closely resembles specimens from the Swiss lakes. A number of stone sculptures of various forms and sizes are also figured, several of the specimens being in the British Museum and other European collections.

A section is devoted to the "Petroglyphs of the Region between Comox and "Nanaimo." These are found on the exposed surfaces of outcropping rock. Several consist of quite extensive groups of human figures, fish, and mythological designs or figures, intermingled and confused. The largest petroglyph thus far discovered in the vicinity of Nanaimo includes several peculiar figures which seem to be reproduced in other near-by groups; one represents a bird-like figure having horns, another is a mythological figure with a dog-like head, a long slender body, and a curved tail.

A very brief description of the "Clubs made of the Bone of Whale" was prepared by Dr. Franz Boas, from data gathered by Smith from different sources. According to Boas: "One of the most characteristic types of specimens from the region between "Vancouver Island and Columbia River is the war-club made of bone of whale or "of stone, broad and rather thin, of lenticular cross-section, and generally with a "carved head."

Quite a number of such clubs, belonging to European and American collections, are figured. In referring to one specimen the rather remarkable statement is made that it was "collected in 1790 by Professor E. H. Giglioli, Florence." This must, of course, be considered as an oversight of the editor; but many sentences throughout the memoir are so ambiguous that it is often difficult to understand what the authors wish to imply. The descriptions of many specimens would have been more easily understood had small sketches of the objects been included. The drawings of several clubs shown in this memoir were made from illustrations of the specimens which have appeared in other publications; but no reference is made to the fact, and we are led to believe the specimens are now figured for the first time.

DAVID I. BUSHNELL, JUNR.

### ANTHROPOLOGICAL NOTE.

THE Comité d'Organisation of the Congrès Internationale d'Anthropologie et d'Archéologie préhistoriques has decided to hold the fourteenth session in Dublin in 1910 instead of in 1909 as originally arranged.

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SUMERIAN. PERSIAN. SCYTHIAN.

MONGOLIAN INDIAN. ARYAN INDIAN.

### ORIGINAL ARTICLES.

Egypt.

# With Plate I-J.

Petrie

The Peoples of the Persian Empire. By W. M. Flinders Petrie, F.R.S., F.B.A.

The widespread empire of Persia has long been one of the great landmarks of civilisation. It gave for the first time peaceable intercourse and trade facilities over some 3,000 miles, from the Ægean to the Himalayas; and in the army list of Herodotus it furnishes us with the first descriptive catalogue of a host of various races. That list deserves far more study than it has yet received, but in another direction it is now illustrated by one of the centres of Persian power—Memphis.

The British School of Archæology in Egypt has begun its great work on Memphis by excavations this spring. The foreign quarter has been found around the temple of King Proteus described by Herodotus, who proves to have been Merenptah of the XIXth dynasty. And all over the foreign quarter are found small heads modelled in pottery, which clearly are copied from various races which were welded together by the Persians, and who all met in the foreign settlement in Memphis. shown are some of the most important types. First is the Sumerian or Accadian, the old Turanian people who started civilisation in Babylonia. Their heads are identified by closely similar portraits carved in stone about 3,000 B.C. and found in Mesopotamia. Below that is the Persian great king, with a long profile of a high type, identified by the tiara, disc, and bushy hair. At the bottom is the Scythian horseman, the Cossack cavalry of the Persian army, as known to us with his pointed hood and bushy beard on the Crimean vases. On the right side, at the top, is the Tibetan Mongolian, below that the Aryan woman of the Punjab, and at the base a seated figure in Indian attitude with the scarf over the left shoulder. These are the first remains of Indians known on the Mediterranean. Hitherto there have been no material evidences for that connection which is stated to have existed, both by embassies from Egypt and Syria to India, and by the great Buddhist mission sent by Asoka as far west as Greece and Cyrene. We seem now to have touched the Indian colony in Memphis, and we may hope for more light on that connection which seems to have been so momentous for Western thought.

The age of these figures is indicated by the links with the Persian occupation of Egypt, in the heads of the Persian king, a Persian officer, and the Scythian cavalry. This Persian dominance lasted from 525 to 405 B.C., and after that there was only a brief eleven years of turmoil and destruction just before Alexander, to which we can scarcely assign works of art. The rise of such figures belongs, then, to the fifth century B.C., when they were all modelled by hand on the solid mass. Later figures were moulded in moulds, as the Indian woman here, whose date is approximately shown by the long-necked amphora on which she leans, which may well be about 200 B.C., and such a date would agree with the moulded Greek figures also found here.

Who made these figures we may guess. Greek taste and ability is seen in the modelling, but the idea of representing foreigners is peculiarly Egyptian rather than Greek. To the Greek settlers in Egypt, with a mixture of Egyptian parentage and influence, such works as these are probably due.

The rest of the work of the British School resulted in finding the foreign quarter, clearing most of the courtyard of the temple of Proteus (Mercuptah), clearing part of the western court of the temple of Ptah and finding there a great quantity of dedicated tablets, delimiting all the large temenos of Ptah, finding two large buildings of King Siamen, from one of which seven inscribed stone lintels and some door jambs have been recovered, and ascertaining the palace site and the gate of the great camp.

The tablets are curious, as giving the meaning of the figures of ears. Such are accompanied by invocation to "Ptah, who hears prayers," showing that the ears are

those of the god to receive the petitions left in his temple. Sometimes there is but a single ear, and not a word or a figure more. On other tablets are more ears, until we reach one with 386 ears engraved upon it. This custom shows the meaning of the small blue-glazed ears that have been found in other temples.

Before going to Memphis the British School worked at Athribis near Sohag in Upper Egypt. Part of the walls of one temple of Ptolemy Auletes, and the site of a temple of Ptolemy Physkon were found. The record of bringing incense trees from Punt (Somaliland) in that age is new to us. A remarkable tomb with two coloured zodiac horoscopes of Roman age was completely copied. And, two miles beyond, a cemetery of the pyramid age was discovered, and tombs copied and photographed. In one tomb is shown a man with six wives, a larger number than is known for any private person. The results of this work are all published in a volume, Athribis, and the results from Memphis will appear this autumn as Memphis I.

A Coptic marriage contract of about A.D. 600-800 found last year has several curious provisions. The assent of the man's father, mother, and elder brother is given, probably because the woman was taken into the house. There is absolute equality of terms from man and woman, who marry according to the custom "of every "free man and every wise woman," showing that celibacy was not honoured. The bridal gift was about 10s., and there is a condition of unqualified divorce, without any legal cause, by either party, on paying about seven times the bridal gift. Such terms in a Christian document clearly show an older Egyptian custom.

In the coming season the British School will work on a cemetery ground at Thebes, and in the dry season continue the most promising clearances already started at Memphis. Both men and money are needful for this largest enterprise of excavation, which promises to teach so much during the next decade.

W. M. FLINDERS PETRIE.

### Scotland: Marriage.

# Pirauru in Scotland. By A. Lang.

Concerning the Dieri and Urabunna custom of Pirauru, or Piraungaru, opinions differ as to whether it is a survival of "group marriage" or a legalised form of license. Perhaps light may be found, while few would look for it, in Sir George Mackenzie's Laws and Customs of Scotland in Matters Criminal. The Tinkers (does he mean Gypsies?) were not capitally punished, he says, for adultery. "And some "respect was had here to that absurd custom amongst Tinkers of living promiscuously "and using one another's wives as concubines."

Here is pirauru in Scotland of the late seventeenth century. Is it a survival of "group marriage" or a mere form of license among Tinkers? It is their "custom," at all events, more or less recognised by law, and few, perhaps, will call it a survival from "group marriage." It is a pity that Mackenzie, as he regarded the custom as "absurd," does not go into details. (He was "Bluidy Mackenzie" of Rosehaugh, not Sir George Mackenzie of Tarbet.)

A. LANG.

### Africa, West.

Frazer.

Lang.

Statues of Three Kings of Dahomey. By J. G. Frazer.

On a recent visit to Paris I was struck by three life-size wooden statues in the Trocadero Museum, which represent three kings of Dahomey—Guezo, Guelelé, and Behanzin—all more or less completely in the form of animals. Through the courtesy and kindness of Dr. Verneau, Director of the Museum, I am able to communicate to Man an excellent photograph of these statues, and another photograph of a throne which belonged to one of the three kings. It is not the first time that these curious figures have been published. They were the subject of an illustrated article by M. Delafosse which appeared in La Nature, No. 1,086, for March 24th, 1894

(pp. 262-266), and to which Dr. Verneau kindly called my attention. The following account of the statues translated from that article may be of interest to readers of Man:—

"These statues are, in fact, symbolical, each of the kings is represented under the figure of an animal which he has chosen for his emblem and of which he bears the name. Guezo, surnamed Kohoulo, that is to say 'the cock,' is represented under the form of a man covered with feathers; Guelelé, called Kinikini, 'the lion,' is figured by a lion rampant; and, lastly, Behanzin, whose surname is Gbowelé, which means 'shark,' has the shape of a dog-fish graced with two arms and supported by human legs.

"The feathers which cover, or rather which covered, the body of Guezo—for many of them have disappeared—are nothing but metal plates, nails, gimlets, old iron of any sort. Only a few of the plates remain, but from the holes and broken ends

it is easy to see that formerly they covered the whole body of the statue from the neck to the haunches, and that they began again at the knees. interval is explained by the presence of a pair of drawers, which is painted on the statue in brown and yellow stripes. This, taken with the name Kokoulo, proves that these metallic plates represented feathers; Guezo's drawers are supposed to cover these feathers, just as Guelelé's drawers are supposed to cover his hair. The figure is coloured reddish-brown; the hair, the eyebrows, and the beard are painted black. . . .

"The statue of Guelelé represents a red lion rampant, with the tail raised, the ears pricked up, the eyes looking upwards, a long snout, and a mouth open and showing two fine rows of white teeth and a very red tongue applied to the lower jaw. The hair is represented all over



the body, except on the thighs, which are covered by a pair of drawers painted green. The feet and the hands are the feet and the hands of a man.

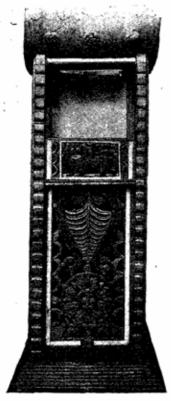
"Behanzin has a green head and a black body. The head, which is rounded from the nape of the neck to the very wide and deep nostrils, and is provided with enormous round eyes, recalls the head of an allegorical dolphin, rather than a shark. On each side the body has a fin, one on the belly, and one on the back. The scales are represented with great care and great regularity.

"The three statues have the arms in the same position, which is that of a boxer preparing to attack—the left fore-arm horizontal, the right fore-arm raised. This combative attitude was formerly emphasized by a weapon in each hand; the holes which must have served to fix the swords may still be seen. Guezo still brandishes in his right hand a Dahomey sword, broad and short. He wears at his back an iron

cartridge-pouch, supported by a belt of the same metal, and above the left elbow he has an iron bracelet. Guelelé wears a similar cartridge-pouch, only in front. Behanzin had one also; the nails which fastened it may still be seen.

"The statues have, in fact, suffered the ravages of time, and, perhaps, also the mutilations inflicted by black soldiers enlisted in our expeditionary column. Guezo arrived in Paris three-quarters plucked; Guelelé had an arm broken and a piece of his snout knocked off; Behanzin had lost his lower jaw, which was probably devouring a European, if we may judge by the king's sceptre, which also represents a shark munching a white man between its teeth.

"The disappearance of Guezo's plumage and of Behanzin's lower jaw had taken place before General Dodds got possession of the statues. The accident to Guelelé has been skilfully repaired by M. Hébert, of the Museum, who has been guided by



water-colour sketches made in Dahomey by Captain Fonssagrives. Other water-colour sketches of the same officer reproduce the bas-reliefs and the paintings which decorate the walls of the palace at Abomey.

The kings are there represented by their symbols; Guezo is there figured by a bird, which must be a cock, Guelelé by a lion, Behanzin by a fish, probably intended for a shark."

Of these kings Guezo reigned from 1818 to 1858; his son, Guelelé, reigned from 1858 to 1889; and Guelelé's son, Behanzin, reigned from 1889 till he was expelled by the French. The throne, of which a photograph is here given, belonged to the lion king Guelelé and shows his emblem, a lion. To this I would add that in the great Anthropological Museum at Berlin there is a statue of a West African king, I think from Dahomey, which represents the monarch with the whiskers of a leopard. Professor von Luschan called my attention to it when I was at Berlin some years ago, and he told me, if I remember aright, that the king hore the name or surname of Leopard.

These statues seem to prove that kings of Dahomey habitually posed as certain fierce animals or birds. The custom deserves to be studied, and may perhaps throw light on such legends as the Minotaur, the serpent of Erechtheus, and so forth. Whatever these animal symbols of the kings of Dahomey may have

been, they cannot have been totems hereditary in the male line, since they differed in three successive generations traced from father to son.

J. G. FRAZER.

Africa: Uganda.

Roscoe.

Nantaba, the Female Fetich of the King of Uganda. By the Rev. J. Roscoe, Local Correspondent of the Royal Anthropological Institute.

When a king is crowned he sends to his father's mother's clan to get a new Fetich Nantaba. The relations prepare a gourd ready for the ceremony, and also choose out the tree, which must be a special kind known as *lusambye*. When these are ready, four men go to the place for the ceremony; the men are Kago, Nakatanzi (who is always of the Lugave clan), Sekitimba (who is of the wind clan), and Mukusu. These four men take a large present of cowry shells and a white goat from the king

for the ceremony. When they arrive, the people of the king's grandmother's clan prepare a feast for them; they then conduct them to the tree which is to be the centre of the function. The men make offerings of shells and of the white goat to the tree, after which it is cut down by some of the men belonging to the clan. Bark cloths are spread out around the tree, so that all the chips are caught as they fall and gathered together on to the bark cloths. When the tree falls, the king's grandmother comes forward with the gourd, and, stooping down over the stump of the tree, holds the gourd so that the wind blows into it and howls; she then crams a few of the leaves of the fallen tree into the gourd and covers it rapidly, whilst all the people shout for joy that the wind has been caught. The gourd is stitched in goat's-skin All the chips which were cut from the tree are gathered and decorated at once. together on to the bark cloths, and a stout stick is cut from the tree stem; this is given to the same old lady, who wraps it in bark cloths and hands it to Kago to carry. The chips, with the bark cloths, are tied to the stump of the tree and left there. The members of the clan guard the stump of the tree and allow it to grow again.

Nakatanza takes the gourd, places it in front of him, and fastens it by wrapping a bark cloth around his body; he then has a bark cloth over his shoulders and walks like a woman near her confinement. All four men set out for the capital, walking slowly, Kago carrying the stick and keeping pace with Nakatanza, who is not allowed to walk more than two miles each day. On their way back the four men are not allowed to eat meat with blood in it; their meat has to be dried before it is cooked to get all the blood out of it, nor may they see any blood. When they reach the king, a house is built for the gourd, Nantaba, and also one for the stick; one of the king's wives, whose name is Kabeja, has charge of the hut in which the gourd is placed. The stick is placed in an upright position, whilst all the sticks of former kings are laid down by the new stick.

When the wind blows strongly Kabeja has a drum beaten in the hut of Nantaba to keep her from wishing to escape, and also to let her know she is guarded. When Nantaba wishes to sit in the sun, Nakatanza has to come and carry her out and put her in the middle of her courtyard. A feast is always made when she comes, and the king's wives come and sit around to see the fetich, because they hope thereby to obtain favour and have children. In the evening Nakatanza carries back the gourd into the hut.

During the lifetime of the king Nantaba is held in great esteem, but directly he dies she is thrown away and another gourd made for the next king.

Nantala is said to have power to assist the king's wives to have children and become mothers.

J. ROSCOE.

Fiji. Rivers.

Totemism in Fiji. By W. H. R. Rivers, M.D., F.R.S. (Percy Sladen Trust Expedition).

Williams\* has described the connection of certain deities with animals and plants in Fiji, and has stated that he who worships the god dwelling in an animal must never eat of that animal. This is strongly suggestive of the existence of totemism; but so far as I know the presence of this institution in Fiji has not been definitely demonstrated, and a few facts gleaned during a recent visit may be put on record, especially as the information was obtained from inhabitants of the interior of the island of Viti Levu, about whose customs little has been recorded. I first learnt of the existence of beliefs concerning the relations of men and animals from Mr. A. B. Joske, who has long been in charge of the northern and eastern parts of the interior of the island. Mr. Joske recognised that these beliefs pointed to the presence of totemism in Fiji, and I am

very much indebted to him for allowing me to publish some facts learnt from him in addition to those collected by myself.

The people of the interior of the island form a number of independent communities which may probably be regarded as tribes, and each of these has a number of divisions and sub-divisions which in the relatively high development of Fijian society have departed widely from the character of the septs into which a totemic community is usually divided. The animals from which descent is traced, and whose flesh is prohibited as food, are usually associated with the larger groups which seem to correspond to tribes, though the divisions of the tribe often have sacred animals or plants peculiar to themselves in addition to those which are tabu® to them as members of the tribe.

The following are examples of sacred animals all taken from a small district in the northern part of the interior of Viti Levu; the people of Cawanisa have as their tabu animal the dravidravi, a small aquatic creature of some kind, and in this case none of the divisions of the people have any restrictions peculiar to themselves. The Cawanisa generally believe that they are descended from the dravidravi which they may not eat. The sacred animal of the Nadrau or Navuta people is the qiliyago, a small black bird with a long beak, and this bird is tabu to the whole tribe, but some of the divisions had restrictions peculiar to themselves, the Wailevu division eating neither the dog nor a fish called dabea, while the Kaivuci might not eat the snake.

Again, the people called Navatusila had as their general tabu animal the ganivutu, a fish-hawk, but one of their divisions, the Hamarama, were also prohibited from eating the fowl; another, the Vadrasiga, might not eat the cogi, a pigeon; the Naremba, might not eat the bird called reba, and three divisions, the Ivisi, Nanoko, and Iasawa might not eat the dog. In each case the members of the smaller groups believed in their descent from the tabu animal. Other sacred animals of this part of the island were the owl and a bird called tuitui, while other examples given to me by Mr. Joske were a lizard and the kingfisher, and a case in which people who believed in their descent from a prawn were allowed to eat this animal but only with its shell.

Williams† states that when the god is enshrined in a man human flesh is tabu, and Mr. Joske gave me an example of this. I was myself told of a similar restriction which had, however, some special features. The restriction applied to one of the divisions of the Nadrau people, the Nasalia, probably a separate tribe which has become fused for some reason with Nadrau. The Nasalia had two divisions, the Nabovesi and the Caurevou, and the latter were not allowed to eat human flesh, but if they killed a man the body was taken to the Nabovesi.

I think that few will doubt that the foregoing facts demonstrate the existence of totemism in Fiji. There are present the three characteristic features of this institution: belief in descent from the totem, prohibition of the totem as an article of food, and the connection of the totem with a definite unit of the social organisation. In the third feature Fijian society differs from that usually associated with totemism in that the sacred animal usually belongs to a group which appears to correspond to a tribe instead of belonging to a division of the tribe. The Fijian social organisation has, however, departed so widely from the primitive type that this is not surprising. At present marriage is regulated solely by kinship, and there is no evidence that any of the social divisions are exogamous. Though the sacred animals usually belong to the tribe, they are, as we have seen, still also frequently connected with the smaller divisions which may possibly be the representatives of exogamous septs and the customary connection of a sacred animal with the tribe as a whole is probably late, a result of the high development of chieftainship in Fiji, the chief having imposed his totem on the whole tribe.

<sup>\*</sup> I have adopted the spelling customary in Fiji, in which b stands for mb, c for the th of the, d for nd, g for the ng of singer, and q for the ng of finger. † Loc. oit.

Among these hill tribes it seemed clear that the sacred animals had become gods, which had, however, retained their animal form definitely. I was told by one of the Nadrau people of certain rules of conduct given to them by the bird qiliyago, and it would seem that we have here an early stage in the evolution of a god from the totem animal. During a short stay in the Rewa district in the low country I found a condition showing a later stage in this evolution. Here each village had a deity called tevoro with a name which usually showed no sign of an animal origin, but in many cases these deities had the power of turning into animals and in such case the people of the village in question were not allowed to eat the animal. Thus, the people of Lasakau, a division of Bau, had a tevoro called Butakoivalu who turned into the sese, a bird of the same shape as the qiliyago, but of a different colour, being blue with a white breast. The bird could not be eaten, and here, as in the hills, it was clear that the restriction extended to the whole people and was not limited to either of the two divisions of which the Lasakau people are composed. The village of Tokatoka had as tevoro Rokobatidua, lord of one tooth (mentioned by Williams), who could turn into a hawk. The people of Vunivaivai had as tevoro Gonirogo, who could turn into a snake. The tevoro of Moana and Naluna were Ranasau and Rokodelana respectively, both of whom were in the habit of turning into the large shark called qio.

A different stage was found in the village and district of Nakelo; the village of this name had a tevoro called Gonetabu, who did not change into any animal, but his priests were not allowed to eat the eel, which looks as if the deity had once had this form. The district of Nakelo had also a tevoro Ravuravu, who did not change into any animal, but was said to have come from a vesi tree. Ravuravu had three sons: Sirivakusaku, who walked like a fish; Tadilo, about whom nothing could be told; and Seyere, who could turn into the sess bird. Neither this bird nor the fish called saku might be eaten by any of the people of the Nakelo district, and the condition described is strongly suggestive of three social units, two at least totemic, which have become fused into one community.

Examples of tevoro from other islands were also obtained here. The tevoro of the people of Vuma in Ovalau is Sucudua, who turns into a white dog, and that of the island of Yadua near Vanua Levu is Volitiyadua, who turns into the qio. In some cases in which the deity never turned into an animal, it seemed that the tevoro was of the kind called halouvatu or war-god, and these gods probably formed a class separate from that of the tevoro of animal origin.

Another variation in the evolution of totemistic belief was found at Tavua on the north coast of Viti Levu, where the conditions were investigated with the help of Mr. Joske. There were four groups of these people, the Kainavauvau, the Kainabuna, the Kaivanuakula and the Kainabula, the last named being a separate people who were burnt out of their home, probably some fifty years ago, and took refuge at Tavua. All four groups had snakes as their sacred animals. The Kainavauvau and Kainabuna were connected with red snakes, which they were not allowed to eat, and all these red snakes were believed to have descended from a certain mothersnake called Tunada. The snakes of the Kaivanuakula had broken tails and were descended from a mother-snake called Mudu, who also had this characteristic. The Kainabula were connected with a kind of snake which lived on a banana called nakukoto or matacawaka, and were descended from a female ancestor called Tunavuni. These snakes were said to be especially friendly with the people of their respective groups, thus if a Kainabula man saw one of his snakes on the banana he would say, "Is that you, Vakawali? Come along!" and the snake would crawl along the man's arm, climb on his shoulder, and twine itself round his neck. The subdivisions of the original Tavua people had no tabu animals peculiar to themselves, but one division of the Kainabula, the Oimua, might not cat the garau or crab, when in their original home, and they believe that they were descended from it.

There remain to be considered certain restrictions on the use of plants as food, and the question whether these plants may also have been totems. I was told of several instances in which plants could not be eaten by the members of certain social Thus, the Nasalia division of the Nadrau people might not eat the via, a plant resembling taro, nor could they eat the soaga or native banana. Similarly the people called Kaisaladina might not cat the damuni, a curved purple yam. Another restriction on the use of plants as food was first given to me as peculiar to the Kainagaladina division of the Nabubucu people. These people were not allowed to eat yams during the two months which begin with the new moon in January under penalty of becoming ill, the two months being called Uluvatu and Nabotoka. The people of Nadrau had the same custom and called the two months Uluvatu and Vunagumu, but they stated that the practice was followed by the whole Fijian people in the old time. The only tabu on plants of which I could learn in the Rewa district was in the village of Naluna, the people of which plant vudivula or white bananas, which are eaten by the priests, but not by the people themselves. It will have been noted also that one of the tevoro of the Rewa district was said to have come from a tree, but in this case I could hear of no restriction associated with the tree.

It seemed quite clear that there was no belief in descent from the plants which were forbidden as food, and it is possible that these restrictions may have had their origin in some source different from that of the restrictions on the use of animal food.

The tabu of a tribe or its divisions is not limited to them, but extends also to those who stand to them in the relation of vasu. This is the Fijian way of putting the matter, but it has the effect that a man may not use the sacred object of his mother's as well as of his own people.

Finally, it must be pointed out that these restrictions and beliefs belong almost altogether to the past, though I met one or two old men who said they still abstained from the use of animals or plants which were forbidden in the old time. Further, I must point out that the data for this paper were obtained during a very short stay in Fiji; so short that I had no chance of mastering the complicated social organisation of the people; and there are doubtless errors in the names and exact social relations of the various peoples whose practices have been cited as evidence of the existence of totemism.

W. H. R. RIVERS.

Africa, East.

Dundas.

# Notes on the Origin and History of the Kikuyu and Dorobo 76 Tribes. $By \ Hon. \ K. \ R. \ Dundas.$

The earliest inhabitants of the country now occupied by the Kikuyu of whom any reliable information is obtainable were a people who call themselves the Okiek. To the Kikuyu they were known as the Asi,\* to the Masai as Il Torobo,† and to the coast people as Wa-Ndorobo, by which name they were also familiarly known to Europeans, though of late the more correct form of Dorobo has taken its place. Curiously enough some writers have recently invented and use a corruption of the Swahili form and style these people Andorobo.

Who the Kikuyu were, and when they first came into the country which they now occupy, are questions not easily answered. The invasion commenced probably about 80 or 100 years ago and has not entirely ceased even now. Undoubtedly many different tribes impelled to migrate by famines, raids, and the pressure from within and without of increasing population, helped in forming the present Kikuyu race. That they represent a fusion of many different tribes is shown by the numerous types to be

seen amongst them, and it is not difficult with a little practice to tell the particular division to which a Kikuyu belongs. Thus the people of Iriaini\* have pronounced Masai features, and many of their chiefs are pure or half Masai by birth. This is due to the fact that when the Kikuyu invaded that district about forty years ago they found it occupied by the remnants of the Aikipiak and Dala-le-kutuk Masai, who owing to famines, raids, and other causes were too much weakened to resist them. The two tribes therefore settled down peaceably side by side, and by intermarrying formed one people.

Again, many of the Kikuyu clans claim descent from certain particular tribes; thus, the Anjiro and Chakamoyo clans say they are descended from the Shuka, the Akkachiko and Achera from the Kamba, the Aesaka from the Chaga of Kilimanjaro. Anyone enquiring into the descent of those present at a meeting of Kikuyu elders will find an extraordinary number of different tribes represented. One is a Maeru, another a Chaga, a third a Masai, a fourth a Shuka, a fifth a Dorobo, and so on.

The actual Kikuyu themselves are said to have come from two tribes called the Shagishu and Ngembe, both of which still exist as tribes somewhere beyond the Maeru country, north of Mount Kenia.

I cannot speak from experience of the Shagishu, but I have met a native of Ngembe whose appearance reminded me strongly of a Kikuyu. This man, who said he had never seen a white man before, told me that his country lay beyond Maeru and that he had come here to visit relatives. These same Ngembe are believed to have been originally Dorobo, and Karuri, one of the paramount chiefs of the Kikuyu, who is himself a Dorobo, claims descent from them. The Ngembe of the present day are probably analogous to the Kikuyu, i.e., they are a mixture of Dorobo and some other tribe or tribes.

Many absolutely foreign tribes have had colonies in Kikuyu for shorter or longer periods. A tribe of coast people called Digo are stated to have lived for many years on the Tana River, in what is now known as the Fort Hall District.† Somali, Galla, Borana, or some other similar people effected a very strong footing in Kikuyu some fifty to seventy years ago. According to tradition they belonged to the Barabio Lokulala, Sigirai, and Endaramuroni clans,‡ and they had settlements at Nyeri, Naivasha, Kijabe, Punda Milia, and generally all over the Kikuyu country.

In those days the Aikipiak Masai occupied the Laikipia Plateau, the Purko Masai were at Naivasha, the Kaputiei in the Kidong Valley, and the Tarosero at Iriaini. The Dorobo, who were still the dominant tribe, occupied with the Kikuyu the present Kikuyu country.

With all these tribes the Somali or Galla lived in a state of chronic warfare. The Larussa, a Kikuyu clan, and the Atwa, a Dorobo clan, unable to hold out any longer, migrated. The former have, it is said, preserved to this day their tribal identity and customs, and are still to be found somewhere in the vicinity of Kilimanjaro§; the latter near Mombasa.

The remaining tribes appealed for assistance against their oppressors to a great medicine man called Supi (or, to give him his correct name, Supeet), the grandfather of Lenana, the present Masai chief.

<sup>\*</sup> The name Iriaini is said to be derived from 'N-Darosero ainei, my Tarosero women. Tarosero is the name of the most important clan in this particular section of the Masai.

<sup>†</sup> Mr. Hollis informs me that the Segeju, who have intermarried with the Digo, a sub-tribe of the Wa-Nyika, have a tradition to the effect that they once lived on the Tana River.

I Barabio is the Kikuyu, Sigiriaiish the Masai for Somali and Galla.

<sup>§</sup> Possibly the Arusha, who live on Mount Meru in German East Africa.

<sup>|</sup> By Mombasa the up-country native often means the coast generally. According to Mr. Hollis the Wa-Sanya call themselves, and are known to the Galla as, Watwa; sing., Wanya.

Supi is said to have instructed the Dorobo to bring him a pair of sandals made of leather having hair on both sides, the Masai to bring him a bull, the dung of which was pure white, and the Kikuyu an animal called Huko (a burrowing rat or mole).

The Dorobo cut off the ears of a donkey, and produced these as the required sandals before Supi; the Masai brought a bull fed on milk only; and the Kikuyu the animal called Huko.

Supi then told each tribe to take its respective charm and to attack the enemy separately and at different points.

The Masai, marching into Kikuyu from Naivasha, fell upon the strangers first, and taking all their stock drove them on to the Kikuyu, who in their turn drove them on to the Dorobo, by whom they were finally routed.

The Somali or Galla were thus disposed of, and only by the name Iregi, which was given to the generation that fought with and expelled them, and by a few women of their tribe, taken prisoners by the Dorobo, are we reminded of their settlements in Kikuyu. Amongst these prisoners may be mentioned an old woman called Barabio, who is still alive and resides in one of Burgo's villages. She was formerly Chief Karuri's nurse.

Needless to say the Masai kept all the cattle which they captured, and this caused a rupture between them and the Dorobo and Kikuyu, who joined forces and waged war on them. After a truce had been made the Dorobo and Kikuyu fought amongst themselves.

If the Kikuyu were to live and increase they had to cultivate the ground, and to do so they were obliged to destroy the forests. The very existence, however, of the Dorobo depended on the preservation of the forests, and hence arose a struggle for survival, which allowed of no compromise and could have but one end.\*

In an incredibly short time the great primæval forests, the home of the Dorobo, were destroyed, and with them this interesting people ceased to exist as a tribe. Deprived of the means of living, many died, some took to cultivation, whilst the majority migrated to other regions, where they formed small colonies, such as are to be found at Baringo, Naivasha, Ravine, Kijabe, on Laikipia and Mau, at Taveta, in German East Africa, and even, it is said, in places as remote as Kismayu—(the clan that went to this last place was the Agumba). This scattering of the tribe accounts for the peculiar fact that Dorobo living in widely different localities speak the same language.† The Baringo, Naivasha, Kijabe, and Ravine Dorobo, and those of similar colonies will, if questioned as to where they come from, usually mention Kururuma and Karirau‡ as the birthplace of their fathers.

As regards the origin of this interesting tribe, we know little or nothing. There appear to have been two branches, the Agumba and the Okiek: the former hunted the game on the plains, the latter in the forests. They lived in pits dug in the ground and covered over with leaves of the wild banana; these pits may to this day be seen anywhere in the Kikuyu country, though of course they become more numerous the nearer one approaches the forest. They are also said to have buried their

<sup>\*</sup> The first Kikuyu to come into the country appear to have been almost without exception pastoral, and they accordingly did not interfere at all with the Dorobo. The later arrivals, who seem to have possessed less stock, purchased from individual Dorobo the right to certain pieces of land or forest. For some reason or other just about the time the Somali or Galla were driven out, a sudden very pressing demand for grain appears to have arisen amongst the Kikuyu; this may have been due to one of two causes—the Kikuyu may have lost through sickness a large amount of stock, or there may have been just at this time a sudden influx of agricultural natives.

<sup>†</sup> Nandi. (In colonies not in touch with Nandi-speaking tribes, the younger generation is rapidly forgetting this language.)

<sup>‡</sup> The country lying between the Rivers Boyo and Mathyoya in Kikuyu

dead, and to have sacrificed to them; the few still surviving are believed to sacrifice every year (or more probably every Mwaka) to their ancestors. They spoke a Nilotic language\*; but languages go for nothing in this country, where a whole tribe will with the greatest facility in the course of a single generation change its language. The Dorobo themselves say that they, the Masai and the Kikuyu, are the descendants of a common ancestral tribe called the Endigiri, and that their ancestors came from beyond Mount Kenya. They also maintain that the clans of all three tribes are identical; that, for instance, the Aisakahuno clan is the Mokesen of the Masai; the Anjiro, the Tarosero; the Amboi, the Molelyan; the Akkachiko, the Aisir; and so forth.

Their Masai name of Il Torobo† might, perhaps, imply that they are descended from a tribe of dwarfs; but though there are undoubtedly pigmy tribes of Dorobo, such as the Muisi‡ of the bamboo forests of Mount Kenya, the Dorobo in existence at the present day are of much the same stature as other tribes in East Africa. The dwarfish figures of the Muisi Dorobo may possibly be explained by the life they lead.

Compared with other natives the Dorobo are not deficient in intelligence; in fact, in many respects rather the contrary is the case. Dorobo wisdom and cunning are proverbial amongst the Kikuyu and Masai, who consult them in cases of sickness and accidents.

K. R. DUNDAS.

### REVIEWS.

#### New Guinea.

Van der Sande.

Nova Guinea: Résultats de l'Expédition scientifique Néerlandaise à la Nouvelle-Guinée en 1903, sous les Auspices de Arthur Wichmann, Chef de l'Expédition. Vol. III. Ethnography and Anthropology by G. A. J. van der Sande, Surgeon Dutch Royal Navy. With fifty plates, 216 text figures, aud a map. Leyden: Late E. J. Brill, 1907. Pp. 390. 31.5 × 25 cm.

Despite the polyglot character of its title-page this valuable work is printed in English, and for the additional trouble which this must have entailed the sincere thanks of English-speaking peoples are due to the author. Probably the first volume of the series gives an account of the places visited and other details of the expedition, as this one plunges without prologue into an ethnographical description of the natives studied by the author and his colleagues. The subjects dealt with are (1) Food, drink, and delicacies; (2) Clothing and ornament; (3) Habitations and furniture; (4) Hunting and fishing; (5) Agriculture; (6) Navigation; (7) Trade and commerce; (8) Industry; (9) Arms; (10) Customs and government; (11) Art; (12) Religion; (13) Anthropology.

† Dorop, pl. doropu, means short in Masai.

According to Mr. MacGregor, of the Church Missionary Society, the name Amaithachiana means child-stealers. I think myself, however, that the name means the fierce little people, and is derived thus:—Amaitha is the name given by the Kikuyu to a fierce people—it is, for instance, their name for the Masai—the word Chiana means children or, in a secondary sense, little people.

<sup>\*</sup> It is difficult to account for the peculiar fact that they spoke Nandi. There are, it appears to me, reasons for believing that a large number of tribes now living in East Africa migrated from the north riâ Mount Kenya, and passed through the Kikuyu country. Many of these, and this may have been the case with the Nandi, Lumbwa, and Sotik, may have settled down in these fertile regions for a period sufficiently lengthy to have impressed their language on the aboriginal inhabitants. It is quite possible that very large areas may have been deforested during, and afforested after, such occupations.

<sup>‡</sup> Endigiri and Muisi are different names for the same people; they are also known to the Kikuyu as Amaithachiana. This name is said by some to have been applied originally to all the Dorobo or Asi. The name Asi itself might possibly mean the rulers, in which case it bears out the theory that the Dorobo were originally the ruling tribe in the country. It is, perhaps, worth mentioning that the word Athi, one of East Africa's principal rivers, is possibly the same as Asi, the Kikuyu name for the Dorobo.

The general plan adopted by the author is first to describe the subject matter of the section dealt with, as it occurs in Netherlands New Guinea, referring at the same time to the accounts of previous writers—confirming or correcting them as the case may be by personal observation; next a comparison is made with what occurs in Kaiser Wilhelm's Land and in British New Guinea, full references being given in every case. It will thus be seen that this bulky volume is not merely a detailed account of the observations made and the objects collected by the author, but it is virtually a summary of what is known respecting the ethnography of Netherlands New Guinea and a fairly complete comparative account of that of other parts of New Guinea. It would be unreasonable to expect this comparison to have been exhaustive, as the memoir would have grown impracticably bulky, but the student will find here quite sufficient material for all ordinary purposes, and the references to authors will put him in the way of more complete information. The bibliography is almost exhaustive.

The descriptions are given in terse language, and all that is written is to the point; greater precision is given by the use of anatomical and other technical terms, and most of the plants and animals mentioned have been identified. In many instances Dr. Van der Sande gives detailed accounts of the structure or manufacture of objects which are of great interest and value; the following are only a few instances: tattooing, &c., hair-dressing, bows and arrows, canoes and navigation, currency beads, and all the varieties of the stitches in the string bags and bands are carefully described and figured. Great praise is due to the author in all that pertains to the material aspects of native life, but unfortunately the social and religious aspects are very inadequately treated. Ignorance of the languages and too short a stay in the various places appear to be the main reasons for this deficiency.

It is true the author has described some small ceremonies that he witnessed, but he is unable to give any certain explanation of them, and our knowledge, small as it was previously, of the religion of natives has not been increased to any extent. Concerning the sociology of the people we know practically nothing. The section on art is very meagre. One cannot help also feeling disappointed with the chapter on Anthropology, many of the observations on psychology and physical characters are of considerable interest, those on the hair and teeth being especially good. Valuable measurements of the limbs and trunk were made, and their respective ratios are given, from which canons of proportion were constructed, but no indication is given of the number of individuals measured, only one measurement in each case being given, but we are not informed whether it is a mean or only a single measurement. The same criticism applies to the head measurements, though so far as the latitudinal index is concerned we learn that among the Sentáni people thirteen were dolichocephalic (-76.4) and nine were mesaticephalic (76 · 5-80 · 9), the average being 75 · 68; while in Humboldt Bay eight were dolichocephalic, seven meso-, two brachy- (81-85 · 9), and one hyperbrachycephalic (86+), the average for males being 77 · 9 and for females 75 · 67. Only one skull was collected, which is described, as are several limb bones.

The very large number of most excellent illustrations made from untouched photographs greatly add to the value of the work, these are distributed throughout the letterpress. At the end of the volume are twenty-nine beautifully executed photographic plates (eight being in colours) illustrating the arts and crafts of the people investigated. One plate illustrates the skull, hands, feet, teeth, &c., and the remaining twenty plates give full length front and side views of men and women. These photographs are of much beauty and constitute a mine of information to the student. Enough has been said to prove that this memoir is indispensable to those who are interested in Melanesian ethnology or in distributional problems; but, indeed, it should be studied by all ethnologists.

A. C. HADDON.

Sociology. Webster.

Primitive Secret Societies. By Hutton Webster. New York: Macmillan, 1908. Pp. xviii + 227. 22 × 14 cm. Price 8s. 6d.

It is good business to get a good title, and Dr. Webster has succeeded in giving his book a title which may attract more than the student of social growth. His purpose is to show how the "secret society" of a comparatively late stage of culture is evolved in principle and in detail, by a process of shrinkage and sub-conscious imitation, from the primitive clan structure. His argument starts with the separation of the sexes as secured by the institution known as the men's house. The clan is thus the first secret society, for it is secret as excluding the women and males of tender age, and is an organised society. Further subdivisions based on age appear in course of time, and we have a series of grades within the tribes. There are rites and initiatory ceremonies to mark each stage and to afford occasion for the inculcation upon the neophyte of his duty towards his fellows in his class and those above him. As the centralisation of authority or the specialisation of function proceed, the secular chief appears, condensed out of the magma of priestly, inhibitory, and magical powers with which the elders as an organised group were invested. At this point appear secret societies which retain the initiatory rites, and which are based on unities entirely different to those which nucleate the tribal groups.

Secular authority may be reinforced by these secret societies, or the absolutism of the chief may find in them a salutary restraint. Thus the initiated form an oligarchy whose hold over the profanum volgus is sustained by means similar to those which are employed at an earlier stage to frighten the women and uninitiated into submissiveness. Mystery, awe, curiosity, and material advantage are their weapons. Organisations thus founded and thus maintained are in the nature of things peculiarly liable to suffer from the disruptive force of social progress. The secret society, if it survives, becomes either a magical confraternity, a religious caste, or a social institution. We may, of course, see in this the germ of learned societies as well as of other associations of men, which to this day practise initiatory rites and exclude the ladies.

It is clear that Dr. Webster uses the epithet "primitive" in a relative rather than in an absolute sense, when he applies it to the social groups which have, on his view, appeared through a process of gradual shrinkage of the original puberty institution, "in which, after initiation, all men of the tribe are members" (page 135). I cannot agree with Dr. Webster in regarding the Naga tribes of Assam as "primitive." True, they have preserved the men's house, but in all else, in the material arts of civilisation, they have made great progress. People who are expert blacksmiths, who know how to make gunpowder and how to use it, who are skilled agriculturalists, who poll their trees, are, from the material point of view, not primitive.

Then so far as the linguistic researches of recent years permit any definite conclusion, it is not possible to class the Nagas with the Indonesian group, as our author has done (p. 10), unless we are prepared to maintain the thesis that the Tibeto-Burman languages and the Indonesian languages on which Ray, Kuhn, and Pater Schmidt have done such brilliant work, are more closely connected than at present is proved. True, the Khasis speak a language which belongs to the Mon-Khmer group, whose affinities with Malaccan dialects have been proved beyond doubt, but the Khasis are matriarchal and do not have the institution of the Men's House. Now we have within the borders of the State of Manipur a wide range of social structure and culture ranging from the relatively civilised Meitheis to the comparatively backward Nagas and Kukis. Among the Meitheis we find organisations both on lines of relationship (the clan structure) and on lines of other natures (the lāl-lup or militia, the kei-rup or tiger club, a village organisation to kill tigers; and the sing-lup or wood club, which

primarily serves as a burial club, but which has been known to meddle in politics). We find that there is a word for the institution of the men's house, but not the institution itself. We also find that in the villages where the organisation is less complex than at headquarters there are still village officers bearing the titles  $P\bar{a}khanlakpa$  and  $Nah\bar{a}$ -rakpa, wardens of the youths and of the younger lads while attached to the Court is a functionary whose title, Ningon-lakpa, warden of the girls, proves him to have been charged with the training of the maidens of the royal household.

Among the Tangkhuls, whose habitat is in the hills immediately east and north-east of Manipur, we find that the clubhouse has disappeared within the memory of living man, very largely on account of the policy of their Meithei overlords, who took special care to break up every feature of the organisation of these tribes which could give them trouble. Among the Mao and Marām Nagas to the north of Manipur, as well as among the Kabuis and Quoirengs to the north-west, the institution of the clubhouse still flourishes. At Mao I was told that the man who made a gift of his own house for this use, enjoyed considerable reputation as a public-spirited man, and that the occasion of such a gift would necessitate a village genna and confer the distinctive dress and tabus of the khullakpa on the donor. In all Naga villages, as also in Kuki villages, are to be found the gossip platforms on which the elders sit and smoke and discuss matters of high policy. The clubhouse is in some cases of a different shape to that of the ordinary house, and is remarkable for its great height and the sheer slope of the roof from the apex to the rear, where it almost touches the ground.

I cannot say that I have ever come across any initiation ceremonies in this area, but then I cannot say that I ever made any enquiries into this subject except that I learnt that the old custom of blooding a warrior before he married had died out under pressure of the Pax Britannica, which did not encourage head-taking. But I have some evidence to show that we have three stages of social classification among these First, the children of both sexes are kept with their mothers till seven or eight, then the boys are separated and enter the clubhouses, of which there are sometimes two, one for the juniors before puberty and one for those who have reached puberty, then the elders go back to the separate houses to the women. Among the Tangkhuls when a man's son marries he has to turn out of his house and vacate his office if a village official. This custom is dying out because it led to the multiplication of houses in a village, a proceeding which was costly when a hut-tax was imposed. But it still applies to the succession to village offices where it at least guarantees that a male in full vigour shall exercise authority. Then I found that the grave is or is not dug by the unmarried lads according to the manner of the death of the person to be buried. In some cases, what we call ordinary cases of death, are buried by the bachelors, while what we, mistakenly as I think, call unusual cases of death, by violence, etc., are buried in graves dug by the elders who do not reside in the club house. I once witnessed the Mangla Tha (a village genna in honour of the dead who have died within the year) ceremony in a Quoireng village, and took careful note of the fact that all the married people were kept inside the village while the bachelors wrestled and competed outside with one another at the long jump and "putting the Then the lads formed into a procession which entered the village and then the married folk came on the scene. The women carried two torches both alight and the men sang a sort of dirge. It may be noted that the bachelors had smeared their legs with white earth and were wearing their gala attire. Among the Kabuis Colonel McCulloch in his classical but unfortunately little known Account of the Valley of Munnipore, observed, as I have in my day observed, that unmarried lads were treated with less severity than married men. Theft by a bachelor is not dealt with hardly, but is severely punished when the thief is a married man.

Among the Quoirengs and Kabuis I learnt that it was usual for the young married men to live in the club house, but to visit their wives stealthily, and that only the old men were allowed to sleep in their private houses. In some villages the girls, too, are kept in a separate house after they are seven or eight years of age. We have here in this area, as has been noted by observers like Davis (Assam Census Report for 1891), laxity before marriage in the matter of intercourse between the young lads and girls, and severe morality after marriage.

One or two other small points occur to me as interesting in reference to the separation of the sexes. I have already mentioned in a previous paper the genna forbidding a woman to see the war stone at Maikel (Journ. Anthr. Inst., vol. 36). Warriors both before and after a raid are genna as regards women. The only people in the area of the Manipur State who tattoo are the northern Tangkhuls, and there only the women tattoo, to serve, as they told me, as a mark of identification in the world to come. The girls are tattooed before marriage, and McCulloch noted that in the fiercer times the price of a tattooed woman of the north was high because her kin would avenge any hurt she took. I once saw some Tangkhul boys in a village far south who had black circles on their noses, and on enquiry learnt that they were marriageable and thus advertised the fact. Their hair was combed down over their face in the fashion of the Mcithei leisābi, or unmarried girl. I chaffed them over their girlish appearance, and was told that when they married they adopted the ordinary style of coiffure in vogue among the Tangkhuls, so that this in itself is a sort of initiatory rite.

The authority of the elders is very great and is seldom disputed, and among themselves the young men maintain a severe discipline, of which a good account is given by Captain Lewin in his book on the Hill Tracts of Chittagong, p. 47.

I have made these notes longer than I had intended, and can only therefore spare a few lines for an expression of the value of Dr. Webster's book, which will be found to contain a mass of interesting information, some new, but a good deal of it from works with which we expect professors of anthropology to be familiar, illuminated by much insight and set forth lucidly.

T. C. HODSON.

# Africa, South.

Kidd.

Kafir Socialism and the Dawn of Individualism: an Introduction to the Study of the Native Problem. By Dudley Kidd. London: A. and C. Black. 1908. Pp. xi + 286. 11 x 22 cm. Price 7s. 6d.

Mr. Kidd is this time more concerned with questions of sociology and of practical administration than of anthropology proper; and in so far his book is less suitable for discussion in these pages than were The Essential Kafir and Savage Childhood. It is, however, full of interest; and the most definite suggestion brought forward—that of "an Ethnological Bureau for Greater Britain" (already advocated by Dr. Haddon and others) is one which ought to meet with a cordial response alike from scientists and philanthropists. With Mr. Kidd's main contention, that the tribal institutions of the South African natives ought not to be interfered with, no disinterested person, at this time of day, can wish to quarrel; while even some not wholly disinterested, if they take long views, may see reason to fall in with it. But when Mr. Kidd comes to work out his arguments in detail we find ourselves puzzled. Sometimes he involves his point in such a mist of words that we are tempted to ask ourselves whether he has not lost himself among the theories of comparative politics which he has been studying. He appears to us to shift his ground unconsciously as he goes on, and (for all his insistence on the objective study of facts) to be not altogether free from the tendency to make the

native fit the theory he has formulated. He is betrayed into inconsistencies here and there (e.g., p. 48 compared with p. 85); and his very use of words, which is occasionally curious—e.g., "vignettes off" (twice repeated, pp. 99, 150), and "view the native problem through their own special *keyhole*" (Preface, p. ix)—seems to show an uncertain grasp of the point at issue.

The chapter headed "Kafir Conceptions of Justice," leaves us with a feeling that the author has been groping after his meaning through some thirty pages, withoutwhile striking out several truths, or half-truths by the way-fully reaching it in the end. The difference between European and native conceptions of judicial procedure is indisputable and can never be sufficiently emphasized; fundamental conceptions of justice (as seems to be admitted on p. 66) are not quite the same thing. That these should be so essentially different as that, e.g., a man should rejoice when sentenced for an act which he has not committed is inconceivable. That the procedure of our courts of justice is merely bewildering to most natives, may readily be conceded: the obvious remedy is, as Mr. Kidd contends, to leave these matters, as far as possible, to be dealt with by the chiefs on native lines. But that it is British love of justice which is "the " very thing of all others to aggravate and complicate the native problem," we may take leave to doubt, while making every allowance for the stupidity so often and so unfortunately coupled with it. As for "our administration of justice" being "clean " and irreproachable from the European standpoint," this is certainly not invariably true of Natal. What does Mr. Kidd make of Litshe's case?--which, by the bye, was absolutely unconnected with controverted political questions. On p. 284 occurs another passage which can hardly be accepted without qualification.

We think the author somewhat exaggerates the preference of the Bantu for despotism. It may be doubted whether the chief is anywhere "an absolute tyrant." He may appear to be so because he has not reached the point at which his people would think it worth while to protest; but disaster is almost sure to overtake him sooner or later should he persist in defying the public opinion of the tribe as voiced by the elders. The evidence taken by the Cape Commission of 1883 scarcely favours Mr. Kidd's theory. Moreover, we cannot resist the impression that, on pp. 6-7, he has somewhat missed the native point of view. A prohibition to eat of the new crop before the ukutshwama custom had been complied with would not strike a Zulu as tyranny, because the chief in "tasting" the first-fruits is not availing himself of a privilege but averting the unknown dangers involved in contact with mysterious and possibly hostile powers. It is true that this is not mentioned in the Zulu statement quoted from the South African Folk-lore Journal. But perhaps the stress there laid on the absolute power of the chief unconsciously reflects something of the questioner's bias.

Mr. Kidd is, in our judgment, quite right in protesting against any unity of policy which should mete out the same treatment to all the different tribes south of the Zambesi. Yet he seems, both in this book and in his former ones, occasionally to have generalised too freely from the case of the Pondos, whom he admits (p. 232) to be "very low in the scale with respect to intelligence and culture." The progressive diminution of intelligence as one proceeds northward cannot be accepted without considerable qualification. Surely the Wakikuyu and Wakamba do not come anywhere near the top of the scale? And one would like to know Mr. Kidd's grounds for asserting that the Zulus are less intelligent than the Delagoa Bay natives. Many other points present themselves for discussion, but it would be impossible to do justice to them without extending this notice far beyond its legitimate length. Enough has been said to show that the book is suggestive as well as interesting, and worthy of careful consideration.

A. WERNER.

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Fig. 1.—The water festival at dedayr.

A CAR IN THE PAGEANT; THE ELEPHANT-BIRD CARRIES OFF THE KITHÄNI MIBÄYA.



Fig. 2.—The water festival at dedaye. A car in the pageant.

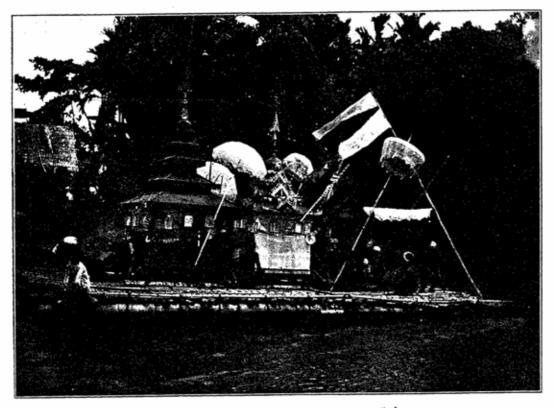


Fig. 3.—Raft containing the image of shin upagon.

# ORIGINAL ARTICLES.

Burma.

# With Plate K.

Brown.

Rain-making in Burma. By R. Grant Brown.

The description of rain-making ceremonies in The Golden Bough, and oespecially that on p. 96 of The Early History of the Kingship (Central Celebes),



FIG. 4.—WATER FESTIVAL AT DEDAYE. A CAR IN THE PAGEANT: A NATTHÂMI (DAUGHTER OF THE NATS).

they have been turned into disciples of Buddha, is, of course, frowned on by strict Buddhists. Part of the Brahma—his headless body—was in one group, in the pageant, and his head in another.

The ordinary means of producing rain in Burma is now a tug-of-war. When there is a break in the rains which endangers the crops, or when the monsoon is late in coming, the young people of the village get a rope and pull against each other. Passers-by help the weaker side, and this goes on till all the rope is covered with hands, and the later arrivals hang on to the waists of the others. At last the rope breaks,

suggest that the Burmese water festival, which takes place yearly in April, has its origin in rain-making rites. (I had to pay five rupees a few days ago to escape a drenching.) If so the connection between water-throwing and rain-making has been forgotten. The festival now marks the new year. At this place (Dedayè) it was celebrated by a very interesting pageant in which various legendary persons were represented, from the Thădya Min to Maha Bandula, who fought the British in 1825.

The legend, stripped of obviously late additions, is that the Brahma Athuya was beheaded by a rival, and, as his sacred head could not be allowed to touch the ground, it was caught by a daughter of the Nats (Fig. 4), who held it in her hands till she was weary, and was relieved by one of her sisters. Seven sisters pass the head from one to another, and when they pass it the new year begins. The Nats correspond to the pagan gods of Greece and

Rome, and the celebration of their memory, except where



Fig. 5.—image of shin upăgôk.

and this, of course, is the best part of the fun. The custom is not less interesting because of the absence of any obvious reason why pulling at a rope should produce rain. So far I have been unable to find any explanation.

A less common method, which has numerous parallels in other countries, is to take the image of Shin Upăgôk, one of Buddha's disciples, who is frequently represented in the temples as doing him homage, and put it out in the broiling sun. Shin Upăgôk is said to have been born after Buddha's death, but he is obviously one of the old gods, perhaps the rain-god, for he is represented as living in a many-roofed pavilion surrounded by water, so that anyone who wished to invoke his aid had to send him a message in a golden bowl, which floated to its destination.

In the early part of his life he is said to have been compelled to remain naked, as a punishment for having, while a boy in a previous existence, run off with the clothes of another boy with whom he was bathing, so that his companion being modest had to remain in water up to his waist till he relented and returned the clothes. This tale



FIG. 6.—WATER FESTIVAL AT DEDAYE. A CAR IN THE PAGEANT.

sounds modern, but the nakedness is consistent with his character as the god of water. In the Buddhist temple he appears, it need hardly be said, respectably clothed.

A third way of producing rain is to wash the cat.

These notes were written on a house-boat in one of the branches on the Irrawaddy River. I had just addressed them to the editor of Man when I was told that we had passed a raft containing the image of Shin Upăgôk (Pl. K., Fig. 3). Turning the launch and going alongside I found two pavilions each containing an image of Shin Upagôk (Fig. 5) thickly covered with gold, and numerous offerings, chiefly plates, lamps, and wisps of human hair. There were men on the raft, but they came from the village on the bank, and had just caught it. The raft was believed to have drifted down from Upper Burma. Anyone who feels inclined to do so boards it, makes his offering, and sends it on its way

again. One man, as the inscription showed, had enclosed one of the images in a glass case; another had provided a gorgeous hanging suspiciously like a European punkah.

That the golden images, not to mention the offerings, are not stolen speaks not so much for the honesty of the people as for the fear in which the saint is held. Those who find the raft towards evening light candles and lamps on it and let it go again, but it must often be in darkness, and it is surprising that it has not been run down by the steamers and launches that throng the river.

R. GRANT BROWN.

Marshall Islands: Navigation.

Joyce.

Note on a Native Chart from the Marshall Islands in the British Museum. By T. A. Joyce, M.A.

The literature dealing with the peculiar charts constructed by the inhabitants of the Marshall Islands is not very extensive. The first account which pretends to give anything like a full explanation of them was published by Captain Winkler of the German Navy in the Marine-Rundschau, Berlin, 1898, pt. x, pp. 1418 to 1439. A

translation of this, not very polished and in parts almost grotesque, appeared in the Annual Report of the Smithsonian Institution for 1899.

A monograph on the same subject was published by Herr A. Shück at Hamburg in 1902. This work, which quotes largely from Winkler's paper, contains a good deal of supplementary information, and illustrates every specimen of these charts which the author was able to discover in Europe, whether in museums or private hands. At that time there was not a single specimen in the British Museum collection, but in 1904 an excellent example was purchased, together with a number of other objects collected by Rear-Admiral Davis. The specimen consists, as usual, of a framework of sticks to which are fastened a number of small shells; these shells represent definite islands, and fortunately the collector had written in pencil, close to many of the shells, the name

of the island which each was supposed to represent.

Charts from these islands fall into three classes:—

First, those called *Mattang*, which serve only to instruct beginners in the art of reading and constructing charts.

Secondly, the *Rebbelib*, or charts which show the whole group, or a large section of the group.

Thirdly, the *Medo*, which show a few islands only.

With regard to the framework which supports the shells representing the islands, the explanation of the various sticks was only obtained by Winkler after great difficulties; his account is discussed and supplemented by Schück, and as I have no fresh information I shall not go deeply into the subject but refer those desirous of studying the question to the papers mentioned above.

Speaking generally, the straight horizontal and vertical

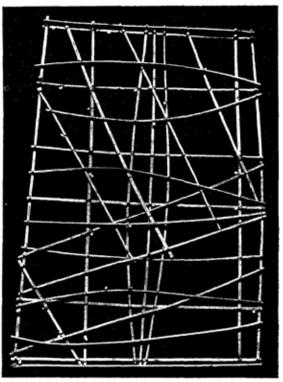


FIG. 1.—NATIVE CHART, FROM THE MARSHALL ISLANDS, IN THE BRITISH MUSEUM.

sticks are intended primarily as supports to the map, though incidentally they may represent the direction of the swells. The diagonal and curved sticks represent the swells aroused by the prevailing winds which travel in a direction at right angles to each stick on the concave side; the swells coming from different points of the compass have separate names, and the appearance of the sea produced by a cross-swell (occurring usually between islands no great distance apart) is also distinguished by a special term, and is regarded as a most valuable indication of the whereabouts of the voyager. It seems fairly clear that charts belonging to the second and third classes, while constructed on the lines indicated by those of the first, are the result of personal observation, are made by an individual for his personal and private use, and cannot be interpreted fully and satisfactorily save by the owner. The British Museum specimen belongs to the second of these three classes, and shows both of the two chains of islands, Ralik and Ratak, of which the Marshall group is composed.

The fact that a few of the shells had been identified with islands rendered it possible to assign the proper names to most of the rest; however, there still remain a few for which corresponding islets cannot be found on Brigham's map. On comparing the accompanying "key" to the chart with the actual map of the group it will be seen that the position of each island with respect to its fellows is indicated with considerable accuracy; any deviation would no doubt be explained by the maker on the ground that there was no stick to which the corresponding shell could be fastened in the exact locality. The distances from island to island are not so correctly shown, but this is a matter of little importance. The winds in these latitudes being constant at certain seasons, the boat can be steered by the swells alone, and its position on the chart relative to the islands judged by indications which the practised eye gathers from cross-swells and the like. Should the island be passed by any unhappy chance, not only does the

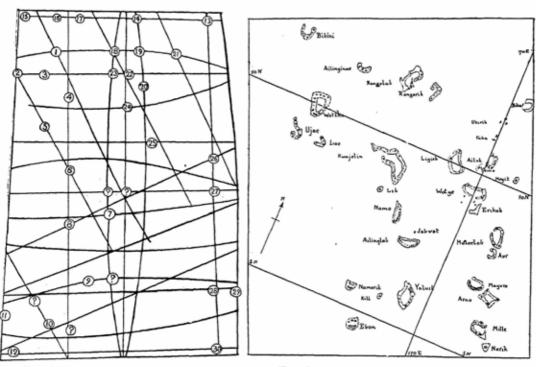


FIG. 2.—KEY-PLAN OF BRITISH MUSEUM CHART.

FIG. 3.—CHART OF THE MARSHALL ISLANDS (AFTER BRIGHAM).

surface of the sea betray the fact to the practised observer, but gives him the clue by which he can alter his course so as to reach his port. From the fact that the Ralik archipelago is more correctly represented it would appear likely that the maker of the map was an inhabitant of one of that chain of islands. For similar charts in other museums, their explanation, and a mass of information concerning Micronesian navigation and its technical terms, reference may be made to Schück's admirable monograph. It may be mentioned that a slight error occurs in Map 5 of Brigham's *Index to the Islands of the Pacific*, from which the above sketch map is taken; the tenth degree of N. latitude is wrongly marked as 5° N. The islands represented by shells on the chart have been identified as follows (see key plan, Fig. 2):—

Activities.				
<ol> <li>Wottho.</li> </ol>	<ol><li>Kwajelin.</li></ol>	<ol><li>Jabwat.</li></ol>	<ol><li>Kili.</li></ol>	
2. Ujae.	5. Lib.	<ol><li>Ailinglab.</li></ol>	<ol><li>Namorik.</li></ol>	
3. Lae.	6. Namo.	9. Yaluit.	<ol> <li>Ebon.</li> </ol>	

### Ratak.

13. Taongi.	18. Rongerik.	23. Ligieb.	28. Mayuro.
<ol><li>Bikar.</li></ol>	<ol><li>Utirik.</li></ol>	24. Wotye.	29. Arno.
<ol><li>Bikini.</li></ol>	<ol><li>Ailuk.</li></ol>	<ol><li>Erikub.</li></ol>	<ol><li>Mille.</li></ol>
<ol><li>Ailinginae.</li></ol>	21. Meyit.	<ol><li>Maloelab.</li></ol>	
17. Rongelab.	22. Yemo.	27. Aur.	T. A. JOYCE.

### Egypt: String Figures.

Cunnington.

Only a short time ago three papers were published in the Journal of the Anthropological Institute,\* dealing with the nature and distribution of string figures and tricks in Africa. Dr. A. C. Haddon described figures from South Africa, Mr. J. Parkinson some from the west coast, and I gave details of others which were obtained during an expedition through the heart of the continent.

Leaving England in March, 1907, on a Biological Expedition to the Birket el Qurun, a big lake in the Fayum province of Egypt, I determined, if possible, to find out whether string figures and tricks were known to the people of that country, from which we have hitherto had no records. We knew that many tribes of African negroes were familiar with this amusement, but it remained to be seen whether it was known equally to the very distinct races of north-east Africa.

During a brief stay in Cairo I noticed a little girl in the street doing something of this kind with a piece of string, but I had no opportunity of following up the clue. While down on the shores of the Birket el Qurun, however, I made determined attempts to get information, but at first without success. It was by showing illustrations of Central African natives performing string figures† that I finally succeeded in making my boys understand, when they at once showed me the three tricks which are recorded below.

It is to be regretted that I was unable to make investigations under more favourable conditions. My biological work necessitated camping on the shores of the lake, and while in some places villages were not very far distant, a large part of my stay was in the actual desert, which bounds the lake on the north and west. Thus, considering the length of my stay—some two months—I had singularly little to do with the natives, except those in my own employ.

I feel that these three simple tricks are only worth recording since they afford evidence of the amusement in a new locality, and because others may thereby be induced to make investigations in a country so accessible and so often visited as Egypt.

1. This trick was shown me by Brahim, one of my boat crew, a local Birket el Qurun fisherman:—Seated on the ground, extend the string by placing it round the neck and over a foot or toe. Cross the index fingers of each hand, the backs of the hands being uppermost and the right index over the left. With the crossed index fingers, now approach the left-hand string from the left, and taking the left-hand string on the radial (or equally well the palmar) side of the left index, pass the hands with the string below the right-hand string and up again on the right of it. Take the original right-hand string with the right index, and crooking the indexes round their respective strings, pull the hands a few inches apart. By moving the left hand with its string clockwise through 180 degrees, pass the head into the left-hand loop from the distal side, at the same time releasing the left hand. On releasing the right hand the string will pull free from the neck.

2. This trick and the one following it were shown me by Abdul, my personal attendant, a native of the district near Wady Halfa:—Seated on the ground with legs parted, extend the string by placing over the feet, after having first passed it through a ring, which is thus imprisoned between the two feet, though free to move backwards and forwards. Extend index and middle fingers of left hand, separate them to form a V, and place them from above, back uppermost, upon the strings close to the left foot. Through the V pull up with the right hand the string which is nearer the body, and into the loop so formed insert the left foot from the distal side. Now pass the ring along the string until it is within the V and retained there by the fingers. With the right hand grasp the string which is further\* from the body, close outside the V on the right-hand side. Pull this up into a loop and similarly insert into it the left foot from the distal side. On withdrawing the left hand and extending by means of the feet, the ring will be liberated and the string return to its original position.

3. Place the string as a double ring on the left wrist, the left hand pointing away from the body, back uppermost. Passing the right hand across proximal to the two radial strings, grasp both the ulnar strings and return, bringing them across proximal to the radial strings and beyond these on the radial side. Twist the strings held in the right hand counter-clockwise through 180 degrees, and into the loop above the twist insert the left hand from the distal side. Withdraw the right hand, and with it take hold of the four strings across the left wrist. The string will pull free.

WILLIAM A. CUNNINGTON.

Australia. Mathews.

Matrilineal Descent, Northern Territory. By R. H. Mathews, L.S. In 1899† and in 1901‡ I reported a number of tribes inhabiting the Upper and Middle Victoria river and tributary streams, in the Northern Territory. Among these tribes are the Chee'-al, Bilyanurra, and Kwaranjee. In the works quoted in the footnotes I gave a table of the inter-marrying divisions of these three tribes, which are substantially common to the natives of the whole of the Victoria valley.

In my tables I classified the women into two sets or cycles, each of which has perpetual succession within itself. I also showed that the descent of the sections, as well as of the cycles, is determined through the mothers. To economise space I will not reproduce the tables here, but ask the reader to consult the works referred to. I have elsewhere reported that a man of any given section may have allotted to him a wife from any one of a specific quartette of women. For actual examples of marriages with what I have defined as Nos. 1, 2, 3, and 4 wives in the Chingalee tribe, which adjoins the Kwaranjee on the east, see Table II, American Anthropologist, VII, N.S., p. 304.

Spencer and Gillen, from their own investigations, prepared an independent table of what they call the Bingongina tribe, probably a southern branch of the Kwaranjee, in which the sections which marry one with another, and the denomination of the offspring, are practically identical with mine, but the authors arranged the sections in their table in such a way as led them to suppose that descent was through the men. In order to make the matter clear I must introduce Spencer and Gillen's table, but adopting my own spelling of the section names. The feminine forms are omitted, so that we may have only eight terms to deal with instead of sixteen.

<sup>\*</sup> As the trick was shown to me, the further string was taken at this point. The object is equally achieved if the nearer string be taken.

<sup>†</sup> Proc. Amer. Philos. Soc., XXXVIII., p. 78; Journ. Roy. Soc., N.S. Wales, XXXIII. p. 112.

<sup>‡</sup> Queensland Geographical Journal, XVI., p. 72.

<sup>§</sup> Northern Tribes of Central Australia, pp. 101, 102.

CYCLE.		HUSBAND.	WIFE.	OFFSPRING.
Wiliuku	-{	Jimidya. Janna. Dhungaree. Dhalyeree.	Jungalla. Joolama. Jambijana. Jamerum.	Dhalyeree. Dhungaree. Janna. Jimidya.
Liaraku	-{	Jungulla. Joolama. Jamerum. Jambijana.	Jimidya. Janna. Dhalyerce. Dhungarce.	Jambijana. Jamerum. Joolama. Jungulla.

Spencer and Gillen profess to have discovered that the first four names in the "Husband" column are called by the collective name of Wiliuku, and that the remainder of the men in that column are collectively known as Liaraku, thus constituting two independent moieties, in each of which the fathers are said to hand on their moiety names to their sons from generation to generation. This alleged succession holds good only while the four men of a so-called moiety marry No. 1 and No. 2 wives; when we examine the progeny of the No. 3 and No. 4 wives the succession of the men collapses altogether.

For example, let us suppose that each of the first four "Husbands" in the above table marries a No. 3 wife. Then we shall find that Jimidya marries a Janna woman and his son is Jamerum; Janna espouses Jimidya and his son is Jambijana; Dhungaree marries Dhalyeree and his son is Joolama; and Dhalyeree takes a Dhungaree wife and his son is Jungulla. If the four "Husbands" of our example had married No. 4 wives the result would have been the same.

These four sons belong to the Liaraku moiety, instead of to the Wiliuku moiety like their fathers. It is indisputably evident that the four "Husbands" in the so-called Wiliuku moiety are sometimes the fathers of Wiliuku children, and sometimes the fathers of Liaruku children—this matter depending absolutely upon the women whom they marry. Therefore, whatever may be the meaning of the terms Wiliuku and Liaraku, it is abundantly clear that they cannot be the names of two independent moieties.

Spencer and Gillen also assert that the Warramonga tribe are divided into Uluuru and Kingilli; that the Wombaia are divided into Illitji and Liaritji; that the Worgaia are divided into Uluuru and Biingaru; that the Chingalee are divided into Willitji and Liaritji, and so on. Examination of the tables given by the authors fails to prove that a single one of the so-called "moieties," in any of the above tribes, can reproduce itself through the men or through any other channel, without which succession, any attempted bisection of a tribe must fall to the ground.

In every one of the above tribes a man's wife may belong to any one of four sections or to either of the two "moieties," and the denomination of his offspring varies accordingly; consequently Spencer and Gillen have utterly failed either to prove descent through the men, or to establish exogamy.

Correction.—In my article on "Social Organisation of the Ngeumba Tribe, New "South Wales," published in Man for February last, Vol. VIII., 1908, No. 10, I wish to make the following corrections:—On p. 25, line 19 from the bottom, for "Ippai" read "Kumbo." In Table II, p. 26, in the seventh column and in the top line, for "Ippai" read "Kumbo," which is the correct section name of Jack Onze. Also in Table II, in the first column and in the eighth horizontal line, for "Kumbo" read "Kubbi."

I may as well take this opportunity of stating that if I be afforded the opportunity of publishing a supplementary list of marriages on a future occasion, I intend to include in the table the *totems* of each person, because such information would be valuable for the purpose of detecting intermarriages of men and women of the same totem in any cases where they may exist.

R. H. MATHEWS.

Fiji. Schmidt.

Totemism in Fiji. By Father W. Schmidt, S.V.D. (See MAN, 1908, 75.) I have read with great interest the article by Dr. Rivers on "Totemism in Fiji" (Man, 1908, 75). It would seem that the article, entitled, "Le Totémisme aux Isles Fiji," by the Rev. J. de Marzan, published in Anthropos, Vol. II. (1908), pp. 400-405, has escaped Dr. Rivers' notice. The existence of Totemism in Fiji has already been established by this article, which, though comparatively short, sets forth in a very lucid manner the fundamental characteristics of the totemism of the inland tribes. Moreover, it contains the solution of some of the points which are still not clear to Dr. Rivers, particularly with regard to the plant-totems and trees. Marzan shows, there is a fundamental distinction between the principal and the secondary totems; the first was always double, consisting of an animal and a tree; and there is always a strict tabu upon the killing or eating of the animal and the felling of the tree. The secondary totem is some variety, either of yam, taro, or banana, or of two or three of these plants together. This secondary totem may be eaten, but only under special circumstances which are described (p. 402). This information, therefore, conflicts with Rivers' unqualified statement that certain tribes might not eat certain kinds of yam, taro, or banana.

Another discrepancy between the statements of the two authors relates to the transmission of the totem of the mother. Rivers states that "a man may not use the sacred object of his mother's as well as of his own people." De Marzan writes as follows:—"La femme mariée dans une tribu étrangère honore les totéms de la tribu "où elle se trouve, et aussi ceux de la sienne. Grâce à ce double culte, elle pourrait, "en cas de mort de son époux, retourner chez elle si on venait l'apporter quelque présent. Mais les enfants de cette femme n'honereront que les totéms de la tribu "de leur père, à moins qu'ils n'aillent demeurer dans la tribu de leur mère "(p. 403). I shall communicate further with de Marzan in order that the uncertainties; which remain may be settled on the spot. The latter author says nothing with regard to the influence of the totem on marriage, and his silence would seem to confirm Rivers' information in this respect; but we must await further researches which have already been undertaken, the results of which will be published in Anthropos.

Meanwhile I should like to draw attention to certain similarities which Fijian totemism appears to bear to a variety of Australian totemism, viz., that of the Arunta and the tribes to the north of them as described by Spencer and Gillen in their two well-known books, and also, to a certain degree, with that of northern and north-west Queensland and the western islands of Torres Straits. The character of this totemism manifests itself in the following peculiarities:—(1) The comparatively great number of plant-totems; (2) the connection of totemism with magic, especially with certain ceremonies for procuring abundance of crops; (3) the connection of totemism with conception and child-birth; (4) the localisation of the totems. All these peculiarities seem to be found in Fiji.

(1) The part played by plants in Fijian totemism is even more considerable than in Australia; moreover, Fijian "plant-totemism" is more systematic than the Australian, which seems, in comparison, to be incoherent and fragmentary. One would imagine from this fact that Fijian totemism is nearer the source of this institution, a source which I hope to trace elsewhere.

- (2) De Marzan mentions some cases in which the (principal) totem is employed in divination in the case of war and sickness (p. 401); but a more curious point of resemblance is given on p. 405: "J'assistais un jour à un grand festin dans l'ouest, "il y avait d'énormes tas d'ignames crues. Quand tout eut été entassé un homme de "la tribu qui avait préparé le festin s'approcha des ignames offertes et en reprit une. "C'était l'igname-totém. Je demandai la raison de cette pratique; l'on me dit que si "l'on donnait beaucoup d'ignames non cuites à des étrangers, il fallait en retirer au "moins une de cette espèce, c.-à-d., une des ignames-totéms de la tribu, de crainte "que les plantations ne produisent plus l'année suivante."
- (3) The connection of Fijian totemism with conception and childbirth manifests itself in the fact that "pour la naissance . . . l'apparition du totém-animal avait toujours lieu"; and it is in perfect accordance with Australian totemism in the fact that it is to the mother that the totem-animal appears; "c'était la mère de l'enfant "près de naître qui était visitée par le totém-animal" (p. 401). But there is the fundamental différence that in Fiji the totem-animal does not effect conception; the apparition is merely an omen for the child already conceived.

(4) The localisation of totems is so strict that even individual strangers are compelled to observe the tabus, etc., of the district in which they are visitors.

I cannot clearly determine if another remarkable, perhaps principal, distinction, which exists between the totemism of north Australia and that of south-east Australia, is present in Fiji. In north Australia the tabu connected with the totem (animal) concerns, properly, the eating of it alone; a man may kill his totem, though he may not do so disrespectfully or wholesale, but he may not eat it; he must give the dead totem to those of another totem. On the other hand, in south-east Australia the tabu is laid primarily on the killing of the totem, and only secondarily on the eating of it, because eating presupposes killing. De Marzan says nothing of a tabu on the killing of the totem, unless it is implied in the following passage: "Le totém principal ne " peut être détruit ou mangé" (but this détruit may refer exclusively to the treetotem which may not be felled). Rivers, however, citing the peculiar case of a human flesh totem, states categorically, "The Nasalia (tribe) had two divisions, the Nabovesi " and the Caurevou, and the latter were not allowed to eat human flesh, but if they killed a man the body was taken to the Nabovesi." The italics are mine. Thus it would seem that, in this particular also, the totemism of Fiji resembles that of north Australia rather than that of south-east Australia. The fundamental distinction to which I here allude has an intimate connection with the first, viz., the presence or absence of plant-totems, as I hope to prove on another occasion. F. W. SCHMIDT.

## REVIEWS.

Micronesia: Linguistics.

Thalheimer.

Beitrag zur Kenntnis der Pronomina personalia und possessiva der Sprachen Mikronesiens. Von A. Thalheimer. Stuttgart: J. B. Metzlersche Buchhandlung, 1908. Pp. 96. 25 × 16 cm.

Micronesia comes geographically between Melanesia and Indonesia, and a consideration of its languages is necessarily of importance in the study of the relationship of the two main divisions of the Oceanic languages. The Micronesian dialects, however, have hitherto scarcely met with the attention they deserve, and although much manuscript material exists, very few accurate details of grammar and vocabulary have been printed.

This interesting paper of Herr Thalheimer's is a valuable contribution, within a limited scope, to the study of these tongues. Pater W. Schmidt had stated (in *Die sprachlichen Verhältnisse Ozeaniens*) that two factors of great importance in the classification of the Oceanic languages are found in the method of using the possessive

suffixes, and in the expression of number by the personal pronouns. Accepting this, Herr Thalheimer considers in detail the evidence for these factors in the Micronesian languages. In the first part he deals seriatim with the personal pronouns in their absolute, conjunctive, and objective forms, giving examples of the use of the words, and their structure as compared with Melanesian and Indonesian forms. In this the analysis of some of the words found in vocabularies is very well done. Two errors may be noted. The Gilbert Island pronoun of first person plural, naira, is said not to be found in the New Testament translation, but it occurs in John viii, 33, and ix, 28, 40, and other places. The Yap pronoun of first person given from Kubary as gemoe, plural "we," is really dual, the true plurals being gadad, inclusive, and gomad, exclusive, corresponding with the second person plural gumed, given by Kubary as gemett. In the second part of the paper the possessive pronouns are discussed. Those directly suffixed to nouns are distinguished from those compounded with another word and used as separate words. Herr Thalheimer finds that the pronoun in these languages is directly suffixed to seven classes of nouns, viz. :- (1) Names of parts of the body and mental attitudes of men (head, hand, will, mercy, &c.); (2) Names of relationships (father, mother, child, &c.); (3) Names of positions in space or time (before, behind, over, &c.); (4) The word "name"; (5) Parts of homogeneous things (leaf, flower, fruit, length, reward, &c.); (6) Personal ornaments and implements (girdle, necklace, digging-stick, house, bed, &c.); (7) Possessive nouns (mine, thine, my food, &c.).

Herr Thalheimer classifies the compound possessive prounouns, formed by a noun and suffixed pronoun under four heads:—(1) Close possession; (2) Pronomina ediva, of things to eat; (3) Pronomina potativa, of things to drink; (4) Pronomina adessiva, of things to be approached. The last is found only in Kusaie. In this section the author, owing to lack of material, has not dealt with all the forms of compound possessive words, which in Micronesia as in Melanesia, are more numerous in some languages than others, e.g., Kusaie has forms for boats, animals, and things for lying on.

The possessive pronouns in Yap, Pelau, and Chamoro are separately discussed, the Pelau and Chamoro being shown to follow the Indonesian rather than the Melanesian construction. The author also briefly discusses similar methods of expressing the possessive relation in languages other than the Oceanic. Herr Thalheimer's conclusions, based on his investigations of these grammatical forms, are that the Micronesian languages fall into two groups. The first includes all the languages except those of Pelau and Chomoro, and has the following characteristics:—

- 1. A division of nouns into two principal classes: one directly suffixing the possessive, the other not doing so.
- 2. Want of a nominal passive form, as e.g., the giving to thee, thy gift.
- 3. No trial used as plural.

The characteristics of the second group, to which Pelau and Chamoro alone belong, are :-

- 1. The affixing of the possessive suffix to all nouns.
- The suffixing of a shortened personal pronoun to the verb.
- 3. A nominal passive form made by adding the possessive suffix to the verb.

As these characteristics apply to the Melanesian and Indonesian languages respectively, it follows that the Micronesian languages take their places in these groups. Dealing with the several peculiarities of the Micronesian languages, Herr Thalheimer finally classes them as follows:—

Oceanic: - Indonesian. - Philippine: (a) Pelau; (b) Chamoro.

Melanesian.—1 (a) Kusaie, (b) Yap; 2. Gilbert; 3. Marshall; 4 (a) Ponape, (b) Bunay; 5 (a) Merir (Tobi), (b) Uluthi, (c) Uleai, (d) Satawal; 6 (a) Mortlock, (b) Ruk.

In his final paragraph the author expresses the hope that the languages of the German colonies in the South Seas may be discussed before it is too late. He refers to the monumental work of "prosaisch-nüchternen" England in the "Linguistic Survey of India," and thinks that such a work should be equally possible for the "Volk der Dichter und Denker." Surely for England itself a "Linguistic Survey of the Colonies" is equally desirable, and in many ways more possible.

SIDNEY H. RAY.

## India.

Hoernle.

Studies in the Medicine of Ancient India. Part I.—Osteology. By Dr. A. F. Rudolf Hoernle, C.I.E. Oxford, Clarendon Press, 1907. Pp. xii + 252. 23 × 4 cm. Price 10s. 6d.

Dr. Hoernle, the well-known Sauskrit scholar, who has thrown light into many obscure corners of Indian antiquity, has in this work turned his attention to the medical systems of ancient India, the rise of which cannot be dated later than 600 B.C. The first part of his work (now published) deals with osteology, and Dr. Hoernle succeeds in proving that the schools of Charaka and Susruta possessed a full and accurate knowledge of the bones of the human body. The connection, if any, between these schools and those of the Greeks remains to be investigated, and Dr. Hoernle's work is the necessary preliminary to any accurate comparative study. The work is highly technical, and demands a combination of anatomical knowledge with Sanskrit scholarship, which must necessarily be extremely rare. Dr. Hoernle's task has been rendered more difficult by the corruptions which his authorities have undergone during the long ages of Brahmanical influence, when all contact with corpses was held abominable, and accurate knowledge became impossible. The work has been thoroughly done, and will be of the greatest value to students.

M. LONGWORTH DAMES.

# PROCEEDINGS OF SOCIETIES.

## British Association.

Anthropology.

Anthropology at the British Association, Dublin Meeting, September 3-9, 1908.

The Anthropological Section of the British Association met this year at the Royal College of Physicians, Kildare Street, Dublin. The address of the President, Professor Ridgeway, dealt with the bearing of Zoological Laws on the study of Man and will be found in full in Nature (September 24, 1908), and in the Report of the British Association. In the report which follows the papers are arranged under subjects and the final destination of each paper, so far as it is known at present, is indicated in square brackets.

## PHYSICAL ANTHROPOLOGY.

Professor J. Symington, M.D., F.R.S.—On Certain Changes in the Lateral Wall of the Cranium due to Muscular Development.—The following are the results of a series of observations upon the relation of the temporal muscle to the skull and brain from birth until adult life. It was found that the muscle was small at birth compared with the brain-case, and consequently the temporal ridge was low at this period of life, only just reaching on to the parietal bone. After birth the muscle grows more rapidly than the lateral area of the skull, and gradually extends upwards upon it, so that the temporal ridge reaches a much higher level than in the infant. This extension of the muscular attachment proceeds gradually, and is probably not completed until adult life. The growth of the temporal muscle is associated with that of the jaws and teeth, and is independent of brain growth. At birth the area occupied by

the temporal muscle was distinctly below the whole of the corpus callosum, and did not reach backwards to the level of its posterior border; whereas in the adult the corpus callosum was entirely within the temporal region. During the period between infancy and adult life the height of the corpus callosum maintained a fairly constant relation to that of the cranium, and the rates of growth of these two structures closely corresponded with each other.

Professor A. Francis Dixon.—The Significance of the so-called Accessory Dental Masses sometimes found in the Upper Jawbones.—An examination of a group of young Ibo skulls from West Africa leads to the belief that the small "accessory "dental masses," which may occur in the maxilla between the second premolar and the first molar, have not the important morphological significance sometimes attributed to them. It has been suggested that these rudiments, which are fairly common in negro skulls, represent aborted or vestigial premolars corresponding to the third premolars of platyrhine apes. The Ibo skulls examined do not bear out this interesting suggestion, for in them the rudiments can be seen to arise as unabsorbed portions of the second milk molar. The origin of the rudiments explains their rather variable microscopic structure and the absence, or relatively small amount, of enamel usually present. The question as to why fragments of the second milk molars should be relatively so frequently retained in certain races is one of considerable interest.

PROFESSOR G. ELLIOT SMITH, M.A., M.D., F.R.S.—Anthropological Work in Egypt.—The earliest known human remains found in the Nile Valley, when compared with those of later times, demonstrate the fact that in predynastic times Egypt and Nubia were inhabited by one and the same race, which has persisted in Egypt with little or no change in physical characteristics throughout the intervening 6,000 years until the present day. On the whole they share the characteristics which distinguish the majority of the peoples fringing the Mediterranean.

The physical characters of the population are remarkably uniform; they exhibit a range of variation, which is not appreciably greater than that of the present races known to us, though, of course, it is easy to select the extremes of these variations and call them "coarse" and "fine" types or "negroid" and "non-negroid" strains.

As we should expect, there is some slight evidence of an infusion of black blood, but this is very small in amount, and its effects very much slighter and less widely diffused than is commonly supposed to be the case. The negro influence is least marked, if indeed it is not a negligible factor, in the earliest predynastic times; but it becomes more and more pronounced in later, and especially so in modern, times.

From the time of the earliest Egyptian dynasties a noteworthy change occurs in the physical characteristics of the people of Nubia, and, though in a very much slighter degree, in Lower Egypt. The inroad of negroes from the South leads to the transformation of the Nubian population into a hybrid race. And there is some evidence to show that even at the time of the Pyramid builders there was some influx of an alien race from the Levant, which intermingled with the predominant Egyptian population of the Delta.

Three thousand years later a much greater immigration of people presenting the same alien characteristics poured into Egypt and Nubia. From this time onwards these foreign immigrants came to Egypt in a constant stream.

Report of the Committee to conduct Anthropometric Investigation in the British Isles.—This may be considered as the final report of the Committee. The reports which have been already issued were reprinted, and included instructions for measuring and specimen schedules.

Report of the Committee to conduct Archæological and Ethnological Researches in Crete.—The Committee issued an interim report with an appendix by Mr. C. H.

Hawes on his craniometrical investigations. It is satisfactory to learn that Mr. Hawes proposes to revisit the island next year with a view to completing his researches.

PROFESSOR G. ELLIOT SMITH, M.A., M.D., F.R.S.—The History of Mummification in Egypt.—In predynastic times in Egypt it was the custom to bury the bodies of the dead in the sand, roughly wrapped in skins, linen, or matting. As the result of the dryness of the soil, and the exclusion of the air by the close adaptation of the sand to the body, dessication often occurred before any putrefactive changes set in, and the corpse thus became preserved in a permanent form.

Thus the idea must have naturally presented itself to the Egyptian people, perhaps in early dynastic times, to attempt to secure by art the preservation of their dead, which was no longer attained naturally, once it became the custom to put the body into a coffin or a rock-cut chamber, because the air thus buried with the corpse favoured putrefaction. The Egyptians would be encouraged in these attempts, to which they no doubt were prompted by their religious beliefs no less than by the natural inclination of all mankind to preserve the remains of those dear to them, by the help which the properties of their soil and climate afforded them, as well as by their knowledge of the properties of the preservative salts, found ready at hand in such abundance in Egypt, and of the resins obtained from neighbouring lands, with the properties of which they had been familiar even in predynastic times. In this way the origin of the idea, the reason for attempting to put it into practice, and the means for doing so become intelligible to us. We have no exact data to permit us to say exactly when embalming was first attempted in Egypt. Although the earliest bodies certainly known to have been embalmed are of the period of the tenth dynasty (found at Sakkara by Mr. Quibell), there is some slight evidence to suggest that some form of mummification was attempted in the times of the earliest Pyramid builders.

By the time of the Middle Empire the general technique of the operation had attained the stage which in its main features was the conventional procedure for the succeeding 2,000 years. But it was in the time of the New Empire that the process of mummification reached its highest development.

Further stages in the evolution of the art of embalming were followed by a rapid decline.

#### ETHNOLOGY.

W. Crooke, B.A.—Rajputs and Mahrattas.—This paper was mainly devoted to a consideration of the views recently enunciated by Sir H. Risley on the origin of the Rajputs and Mahrattas.

The former are classed by him, on the evidence of anthropometry, as "Indo-Aryans." But historical and other evidence points to the conclusion that, so far from being a distinct ethnical unit, the Rajputs form a status group, compounded from varied elements. Thus, in the Ganges valley and along the central ranges of hills, many Rajputs are promoted from the indigenous, so-called "Dravidian," races. This fact is familiar to all ethnologists. More important and novel is the evidence from epigraphy recently discovered, which shows that many of the Rajputs in the Punjab and Rajputana are sprung from Scythian and Hun invaders. These foreigners were a brachycephalic people, and the failure of craniometry to detect this strain in the present population may be due either to insufficient investigation or to the impossibility of classifying mixed races on the basis of skull form.

Next, it was shown that there is no historical justification for the assumed Scythian entry into the Deccan and Southern India as far down as Coorg. The presence in those regions of a brachycephalic strain, whatever may be its origin, cannot be due to a Scythian or Hun invasion.

The Mahrattas, again, do not constitute a stable ethnical unit. They are a status

group, the basis being the "Dravidian" or indigenous Kunbi tribe. The higher classes, owing to their rise in social importance, have asserted and obtained the right of connubium with the Rajputs.

It was suggested that the influence of environment and sexual selection has been to some extent overlooked in recent discussions on the ethnology of India, and that these causes may possibly explain the uniformity which characterises the physical character of the people of the Punjab.

E. Sidney Hartland.—On a Collection of Dinka Laws and Customs.—Collected by Captain H. D. E. O'Sullivan. [Journ, Roy. Anthr. Inst.]

C. G. SÉLIGMANN, M.D .- The Veddas .- The Veddas may most conveniently be considered under three headings, Veddas, Village Veddas, and Coast Veddas, for it seems that at the present day the Veddas fall into three groups characterised by different sociological features. The coast Veddas fish and have borrowed largely from their Tamil neighbours, while the village Veddas have, to a considerable extent, intermarried with the Sinhalese. But in spite of these lapses both groups retain the remains of their old clan organisation in the majority of their settlements, showing their connection with those less contaminated and wilder folk who have commonly been spoken of as "rock" or "jungle" Veddas. On the psychical side, the life of all Veddas is unusually limited in every aspect except one, namely, their regard for the dead, and even this regard, which attains the intensity of a cult, has given rise to no decorative art; indeed, a number of crude drawings, for the most part of animals and men, executed on the walls of certain caves, were the only examples of decorative art seen, and personal adorument is at the lowest ebb. But although this cult has produced no pictorial or plastic art, it has given rise to a series of dances, often pantomimic, and so perhaps in the nature of imitative magic, but whether pantomimic or not, accompanied, except in certain exceptional circumstances, by offerings of food to the spirits of the departed. Though others take part in them, these dances are performed especially by men who have been trained to invoke the yaku, as the spirits of the dead are called, and the use of a ceremonial arrow with a blade over a foot long and a short handle is an indispensable feature of some of these ceremonies, in all of which the "shaman" becomes possessed by one or more of the yaku he invokes.

Finally, as to language: all Veddas speak Sinhalese or dialect of Sinhalese with a predominance of *ch* sounds which makes Vedda talk sound harsh, and has led to the belief that they have a language of their own; but in addition many Veddas have also a small number of words which are not obviously Sinhalese, or are Sinhalese periphrases; these classes of words are specially used in hunting and in addressing the *yaku*.

MISS B. PULLEN-BURRY .- Four Weeks in New Britain.

#### ARCHÆOLOGY.

J. P. Droop, B.A.—Neolithic Culture in North Greece.—Recent exploration of the neolithic culture of Northern Greece has shown that the plain districts of Southern Pelasgiotis, Thessaliotis, Phthiotis, Malis, and Phocis were inhabited from an early date by three peoples alike in culture, and near akin, but distinguishable by the varying style of their painted pottery.

The stone implements consist of celts (sometimes bored), rubbers, and polishers; while obsidian chips are much more frequent than flint.

Traces of eight successive settlements show that the period of painted pottery gradually passed, after the fourth settlement, into a period of unpainted polished ware.

The eighth neolithic settlement is roughly dated to 1300 B.C. by the presence of important Mycenean sherds.

A series of tombs sunk into the remains of this eighth settlement indicates a subsequent poor bronze period. Thus, during the development of the Ægæan bronze

culture the north of Greece was still in an Age of Stone, and used bronze only at a comparatively late date, and presumably but for a short while before the introduction of iron.

The date at which these neolithic peoples brought in their comparatively high culture may be placed in the middle of the third millennium.

M. Thompson, B.A.—The Excavations of the British School at Athens at the Sanctuary of Artemis Orthia at Sparta.—The sanctuary of Artemis Orthia, one of the most important centres of Spartan religion, and especially celebrated for the annual scourging of the Spartan boys, was discovered in 1906. This year's work gave the remains of the primitive temple contemporary with the great archaic altar, and like it resting on the cobble pavement. The mass of votive offerings was especially rich in its neighbourhood.

The primitive temple has been largely destroyed by the foundations of the later temple. The part preserved lies on the south side of the later building, and fairly symmetrically with regard to the altar, although the orientation is slightly different.

The remains were covered with a mass of earth burned red, recognisable as the remains of mud-brick walls destroyed by fire. Beneath this were the foundations of the end and part of the side of a rectangular building consisting of a single course of undressed stones. At the west end of this building the walls contained some vertical slabs in situ, and there were traces of a small inner cella. Along what was probably the central line of the building was a row of irregular stone slabs laid flat at intervals of about a yard, and corresponding to these in position were similar slabs set in the foundation of the walls. All the slabs seem to have supported wooden timbers, those built into the wall serving as a frame for the building, and the others forming a row of pillars down the centre. The eastern part was completely destroyed, and with it all possibility of recovering the form of the entrance. A fragment of rooftile was found, but clearly later than the building itself. This, however, almost certainly had a gable roof, with a row of pillars supporting the roof-tree. It is noticeable that the temple at Thermos in Ætolia, which replaced a similar mud-brick building, had a row of pillars down the middle.

In this primitive building we may see the earliest Dorian style, and the conclusions drawn from its remains point to a building essentially identical with that which Doespfeld has already reconstructed from the indications afforded by extant monuments of the developed Doric style.

Much progress has also been made in the excavation and study of the votive offerings. The suggestion that the so-called Cyrenaic pottery is really Laconian has been very fully confirmed by the discovery of Cyrenaic vases, and still more by the series of pottery leading up to and degenerating from the fine Cyrenaic style.

Of the terra-cotta masks which were such a feature of the excavation of 1906 many more have been found, and they have been proved to belong almost entirely to the late sixth and early fifth century, the period immediately following the building of the later temple. No ivory dates from the time when its place was taken by bone. All the rich series of carved ivories, this year much increased, belongs to the period when the primitive building was still standing.

T. ASHBY, M.A., D.LITT.—The Four Principal Aqueducts of the City of Rome in Classical Times.—Among the aqueducts which supplied the city of Rome the four which came from the upper valley of the Anio were the most important—the Anio Vetus, the Aqua Marcia, the Aqua Claudia, and the Anio Novus.

Considerable remains of these conduits still exist. Their course, known fairly well as far as the village of Gallicano, in the district between the Sabine and the Alban Hills, has hitherto been treated as unknown between Gallicano and the point some

seven miles out of Rome, where they emerge for the last time from the ground, and run upon arches into Rome. Careful investigation, and especially the search for pieces of the calcareous deposit brought down by the water, which was removed from the channels when they were cleaned (which must have been frequently necessary), have, however, made it possible to determine their course accurately.

Report of the Committee to conduct Archæological and Ethnological Investigations in Sardinia.—Dr. Duncan Mackenzie was able to visit Sardinia last autumn,
and spent nearly two months in the island. His researches were mainly devoted to
the study of the relation between the "nuraghi" and the so-called "tombs of the
giants," the latter consisting of long chambers—sometimes as much as 50 feet long,
but only 3 or 4 feet broad and high—with a semi-circular area, inclosed by upright
slabs or by walling in front of them; and he was able to discover several cases in
which the "nuraghe" and the tomb seemed to be in such close relation to one another
(the latter being placed on a mound in the neighbourhood of, and easily visible from,
the former) as to make it clear that the former was the fortified habitation, and the
latter the family tomb. This was still clearer in several instances where the "nuraghe"
itself dominated a group of smaller circular buildings, no doubt dwellings under the
protection of the "nuraghe," and usually inclosed in a ring wall starting from it.

C. T. CURRELLY. — A Sequence of Egyptian Stone Implements. — The rough early pieces are found in the cemented quaternary gravels of the Thebaid. The development of the paleolith may be seen from the depth of the patina and also the scratchings; fourteen distinct shades of colour may be seen.

The flint of the Thebaid is of a uniform kind and colour, and except for the oldest forms the implements have been lying on the plateau under the same conditions for different periods of time. In addition to the depth of colour many pieces are reworked and show more than one patination. Several thousand pieces were examined, and form and patination were found to go together. Each type of implement has definite limits of patination.

The neolithic implements of the Thebaid show little patination. The Fayum neoliths show a considerable amount of patination and also reworking. In these the patination is different from the Thebaid ones, as the flint is of a different kind.

The enormous length of time of the neolithic period is shown by the number of totally unpatinated implements that are made by re-working deeply patinated neoliths. The forms similar to those obtained from the predynastic tombs show little or no patination.

REV. W. A. ADAMS, B.A.—Some Ancient Stone Implement Sites in South Africa.—The sites examined were five in number:—

- The hill-slope near the coast at Bosman's Crossing, Stellenbosch, yielding rudely chipped picks and other implements of the paleolithic type, embedded in clay.
- The Karoo, near Kimberley. From this were collected weather-worn specimens, showing the transition from the older form of palæolithic implement to the neolithic axe.
- 3. The Vaal River terraces, near Kimberley. There is an extensive stone implement side at Pniel, where the process of manufacture can be clearly traced. Higher up the banks "pygmy" implements were also discovered.
- 4. The uplands of Rhodesia, near Bulawayo. Roughly chipped disc-like scrapers were procured, and well-made "pygmies."
- 5. The headlands at the Victoria Falls. Palæolithic implements were here collected, some of them of chalcedony, of large size and highly glazed. A few flakes are water-worn.

[A report of the other papers read before the section will appear in a subsequent number of Man.]

			•	



FIG. I.—BARK CANOE, GULF COAST.



FIG. 2.—BARK CANOE, EAST COAST.



Fig. 3.-Dug-out: Single outrigger,



Fig. 4.—pug-out: double outrigger.

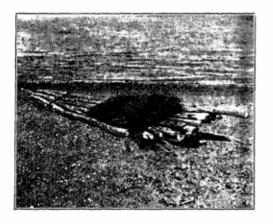


Fig. 5 .- Raft, Wellesley Group.

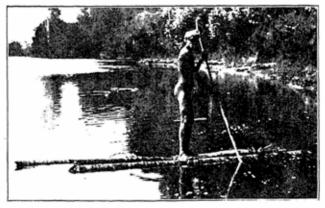


Fig. 6,-RAFT, TULLY RIVER.

## ORIGINAL ARTICLES.

Australia.

## With Plate L.

Roth.

Australian Canoes and Rafts. By W. E. Roth, M.R.C.S., Local Correspondent of the Royal Anthropological Institute.

Canoes are of two classes, according as they are made from bark or dug out from a tree-trunk. On Plate L, Figs. 1 and 2, are shown two such bark canoes, the one from the Gulf Coast (Fig. 1), the other from the East Coast (Fig. 2). The former is made of a single bark sheet, folded in its length, and sewn with cane at the extremities; the sides are kept apart by a very primitive form of stretcher, too much stretching being limited by intermediate ties. A large conch shell, &c. is used as a bailer when the water splashes in, an event which is of very frequent occurrence, considering that these frail craft may be observed skimming along in practically all weathers. Should the canoe turn turtle, the savages are so expert in their use that they can scramble in again after bailing, notwithstanding that a rough wind may be blowing. The paddle used is a mangrove stock, the naturally flattened butt of which does duty for a blade. On the East Coast the bark canoes are on the whole smaller, and can be built of one, rarely of two, sometimes of three, separate sheets carefully sewn and caulked; this latter is effected by means of the "paper-tree" bark, which markedly swells when wetted. In the neighbourhood of the Tully River the paddles are small square pieces of wood, or bark, materials which are said to have replaced the two large pearl-shells which were employed before the days of European settlement. The author has watched the whole process of manufacture of these craft, which requires a couple of days for completion.

"Dug-out" cances are found on the extreme north of Cape York Peninsula and thence down the eastern coast-line to about the neighbourhood of Hinchinbrooke Island, one of the many beauty-spots of Northern Queensland. There is little doubt that these "dug-outs" are of Papuan origin, a development of the wonderful vessels described in New Guinea. Indeed, certainly up to four years ago, the hulls were traded along three different routes from the Commonwealth's most northerly possession to various islands of the Torres Strait, whence some of them came into Queensland. In the author's experience, the original trade price to the island middle-man was six pounds of tobacco and a tomahawk. This does not, however, imply that the Queensland savages cannot make "dug-outs" for themselves, but a long time and considerable patience is required for burning and chipping one out. The prow is usually more or less flattened to enable the fisherman to stand here and throw his harpoon at the turtle or fish that he may be after. In the more northern latitudes each "dug-out" is provided with two out-riggers or floats (Plate L, Fig. 3)—the New Guinea pattern—but further south there is only one (Plate L, Fig. 4). With fine weather and strong paddles, these craft, though heavy and cumbersome, can travel 15 to 20 miles a day in the open sea.

The kind of raft found on the Wellesley Group of islands in the Gulf of Carpentaria is shown in Plate L, Fig. 5. It is formed of numerous logs of "white mangrove" tied together at the butts as well as at the extremities, with the result that it is much narrower forward than at the stern. On top is placed some sea-weed, a sort of cushion for the voyager to sit upon. With such frail craft the savages will not only visit island and island, but even cross over to the mainland, usually on the one course, making for a spot somewhere in the vicinity of Point Parker. As might be expected, a raft like this, in spite of the paddle that directs it, will occasionally be carried out to sea by a sudden gale, when the traveller may be picked up by passing steamers; but these are few and far between up here. The author knows of three such cases where the venturesome native has been rescued, but, unable to render himself intelligible as to

which of the many islands, or group of islands, was his home, has had to bow to the inevitable and become a landsman without kith or kin. In one of these three cases it was reported that a would-be extra-intelligent policeman, being determined upon discovering whence the survivor had originally come, showed the savage an atlas-map of the Gulf of Carpentaria, and could not understand why the latter was unable to point to his place of origin.

Log-rafts are also met along the eastern coast-line, on the Mulgrave, Russell, Barron, Tully, and other rivers, and are usually punted along with a pole. They are made of from three to five or six odd lengths of light timbers tied together near their ends with native rope. Three trunk-stems of the wild banana will support any ordinary savage. According to whether the structure is intended for temporary or permanent use, so it is the less or more carefully trimmed and strung together; in the latter case a fire may be often observed carried on a layer of clay. Such a raft is used for comparatively short distances, and is very different from the variety found in the Gulf of Carpentaria. The illustration (Plate L, Fig. 6) was taken on the Tully River; the "white" on the individual's head and face is really the remnants of the white cockatoo feather-down stuck on for the sake of ornament at certain of the native ceremonies, one of which he had just come from attending. W. E. ROTH.

New Guinea: Totemism.

Seligmann.

Note on Totemism in New Guinea, with reference to "Man," 1908, 75 and 84. By C. G. Seligmann, M.D.

The interest attaching to Dr. Rivers' note on "Totemism in Fiji" (Man, 1908, 75), and to Father W. Schmidt's comment (Man, 1908, 84) upon this, leads me to draw attention on the similarity of the Fiji totemism discussed by these two authorities and that prevailing in south-eastern British New Guinea. Both are characterised by the possession by each unit, whether this be a clan (B.N.G.), a tribe or division of a tribe (Fiji), of a series of totems belonging partially or entirely to different groups of living things; that is to say, by a system of "linked totems," using the term by which I speak of this form of totemism in the forthcoming reports of the Daniels Expedition to British New Guinea. It must, of course, be remembered that the Fijians have advanced further than the inhabitants of British New Guinea, as is shown by the existence of gods among the former; but when allowance is made for this, the resemblance of the two systems of linked totems is very striking.

Thus in Fiji the totems of the Wailevu division of the Nadrau people are a bird (quiliyago), the dog, and a fish called dabea. Further, the Nadrau people are not allowed to eat yams for two months in the year (Rivers), or, more generally, such "secondary totems" are cooked with certain marks of respect (de Marzan).

In south-eastern New Guinea the typical arrangement of totems is for each clan to have a bird, fish, snake, and plant totem. This condition prevails in Milne Bay; the bird totem is nearly always the most important; sometimes two birds are linked together as of, roughly, equal importance; as in the case of one of the Wagawaga (Milne Bay) clans, which has two practically equally important bird totems, Siai (Paradisea raggiana) and a small bird called Kulohulo. In Tubetube, an island of the Engineer group, plant totems are absent, except possibly in the case of one immigrant clan. In the Trobriand group the snake may be said no longer to exist as a totem, and the fish totem is of less importance than in Milne Bay. But here each main bird totem has linked with it a four-footed vertebrate—pig, dog, crocodile, or "iguana."

On the mainland at Bartle Bay, opposite the d'Entrecasteaux group, almost all possible variations occur in the linked totems of the three neighbouring communities of Wamira, Wedau, and Gelaria, the most striking features being the loss of the plant

totem and the great importance attached to the snake totem. I have tabulated some of the variations of the linked totems in south-eastern British New Guinea, as this is by far the easiest method of representing the facts under discussion and have at the end placed two Fijian examples for comparison. The importance of each of the totems in the New Guinea groups of linked totems is indicated by a numeral in brackets, and for the sake of simplicity no mention has been made of the name of the clan to which each group of linked totems belongs.

		1						
LOCALITY.	BIRD.	FOUR-FOOTED VERTEBRATE.	Fish.	Snake.	PLANT.			
Milne Bay (B.N.G.).	Bird of Paradise (1) and Kulo- kulo (1).		Kurau (2) -	Motaidaidaga (3).	Modau (4).			
Tubetube (B.N.G.).	Fishhawk (1)		Warumu (2)	Gubadi (3) -				
Trobriands (B.N.G.).	Fishhawk (1) -	Dog (2) -	? (3)		Meku (3).			
Wamira (B.N.G.)	Wega (1)	~ ~	Samagara (2)	Garuboiu (1) (a constrictor).				
13 39	Fowl (1) and blue pigeon (2).	_		Irikiei (1) (a venomous snake),				
19 19	Cassowary (1) and Beulo (2).	_	Bouri (? 3) Moga (? 3).	Gabadi (1) (a constrictor).				
Wedau (B.N.G.)	Fishhawk (1), hawk (2), and fowl (2).	-	Shark (1)	Nawari (3) -				
19 19	Sea - gull (1), quail (2), and korekore (2).	" Iguana" (I)		Nawari (1) -				
Gelaria (B.N.G.)	Hornbill (2)	Pig (3) -		Garuboi (a con- strictor) (1).				
Fiji, Wailevu (Rivers).	Quiliyago	Dog	Dahea		Yam.			
Wainimala (de Mazan).	Parrot	Vokai		No. dige	Vasiti (a tree).			

I could obtain no account of the origin of the New Guinea linked totems at Milne Bay or Tubetube, but on the Marshall Bennet Islands close to the Trobriands each clan traced its totems to a hole in the ground from which emerged the ancestors of the clan bearing with them their animal totems while their plant totems grew near the place of their emergence into the upper world. At Gelaria, in the hills behind Bartle Bay, Garuboi is the snake totem of the clan, which I believe to be the most important of the community. To the south-west of Gelaria there stands a double-peaked mountain whose peaks are called Viara and Gaova. On Viara was born the snake Garuboi, who "made us, the beasts, earth, and we know not what other things," and it was he who long ago separated mankind into clans (banaga) and named them. Here, then, the totem has taken upon itself certain godlike attributes without ceasing to be one, although the most important, of a series of linked totems.

C. G. SELIGMANN.

Solomon Islands.

Edge-Partington.

Stone-headed Clubs from Malaita, Solomon Islands. By J. Edge-Partington.

Baron von Hügel's note in Man (1908, 16) on the stone-headed clubs of Malaita. has opened up one of the most interesting subjects connected with the history of the Solomon Islands. Baron von Hügel is in error, I think, in supposing that the two clubs he illustrates come from different islands, and also that this form of club was used only by persons of rank, or that they were made in small numbers; nor do I consider that they were survivals of an earlier type. In order to give my reason for thinking so

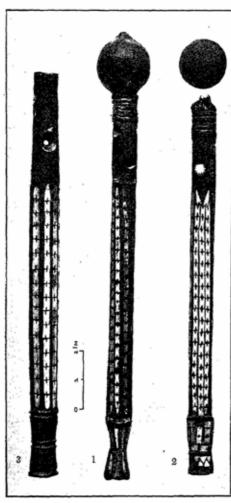


FIG. 1.

it will be necessary to recapitulate what has already been published on this subject. To Lord Amherst of Hackney and Mr. Basil Thomson we owe a debt of gratitude for their labours in translating the various Spanish manuscripts which form the subject matter of their work entitled The Discovery of the Solomon Islands by Alvaro de Mendaña in 1568, published by the Hakluyt Society in 1901. From this we learn that to these clubs the islands themselves owe their name, as the editors point out in their introduction that "doubtless " these stone clubs were partly responsible " for the wild stories of gold in the " islands that were current in Peru for " many years afterwards, if not for the " suggestive name of 'Islas de Salomon' " itself," to the end, as Guppy (The Solomon Islands, p. 247) puts it, that "the " Spaniards supposing them to be the " islands whence Solomon obtained his " gold for the temple at Jerusalem, might " be induced to go and inhabit them. " Thus the name of the new discovery " was itself a pious fraud."

In spite of the fact that these clubs are now extremely rare, a fact borne out by Guppy, who remarks (p. 74) that no weapons of the character of maces came under his observation, yet they must at one time have been extremely common in the island of Malaita, and not confined only to persons of rank as suggested by Baron von Hügel, for, to quote again from the

Hakluyt volume "most of the inhabitants seemed to have been armed with clubs, "with stone heads covered with plaited grass." One of these had been seen at the east end of the Guadalcanar, and the fact that they are mentioned in most of the manuscripts testifies to the profound impression that they made upon the Spaniards, who judged them from their weight to be of gold. The soldiers carried on a brisk trade by bartering caps for them, until detected by Henriquez, who, to check them, dispelled the pleasant fallacy by hammering two of them together until they broke, though the metallic appearance of the fracture seems to have

left some of the Spaniards unconvinced. On p. 45 (Gallego's narrative), "We "found in this island (Malayta) knobs of the size of oranges of a metal that appeared "to be gold, below which metal was pearl shell. They have them fixed upon a stick "to fight with when they come to close quarters; most of them carry them."

Then on p. 182 (Mendana's narrative), "We found in these islands some clubs, "seemingly of metal covered with woven palm; they are very heavy and are used in "warfare." In a footnote the editors say that the stone is of a very hard and heavy volcanic formation, containing speeks of pyrites, which in the inflamed imagination of Gallego and his companions "became gold." Mr. Woodford furnishes the following:—
"That in this part of Malaita and nowhere else in the Solomons, except Rennell Island, "are made small bâton-like clubs about 18 inches long, which are said to be used for "giving the coup-de-grâce to wounded prisoners." In the Brisbane Museum there is a

star-shaped stone-headed club labelled as coming from Rennell Island (*The Ethnographical Album*, III., plate 34, No. 7). I think, however, that before this can be accepted as a true locality further evidence is necessary. Mr. Woodford has informed me that "the part of Malaita" where the clubs are made is the neighbourhood of Royalist Harbour.

The clubs which I figure (Nos. 1 and 2) are now in my collection, and come from the same source as those in the Cambridge Museum, and in each case Nos. 1 have been already published on the plate facing p. xl in the Hakluyt volume referred

to. I also illustrate the British Museum specimen quoted by Baron von Hügel. Amongst my papers I have a record of a further specimen, but do not know in whose possession it is: it differs from any of the others in having a bifurcated handle. Both in this specimen and in two of those figured in The Ethnographical Album, III., plate 34, there is a cord attached to, or near to, the business end. This is evidently not a wrist cord in the ordinary sense, but a loop for passing over the arm in order to leave the hand free for other weapons, either of offence or defence. Of the specimens figured in the album, Fig. I is in the Macleay Museum of Sydney University;

Fig. 2 was, when I drew it, in the possession of the Rev. George Brown, of Sydney; and Fig. 3 is in the Australian Museum, Sydney.

The Rev. Walter Ivens, of the Melanesian Mission, resident in Ulawa, gives me the following as the native name of these clubs:— Ware-i-hau or Ware-ni-hau (Hau = stone—i, or ni, the genitive).

F1G. 2

J. EDGE-PARTINGTON.

Solomon Islands.

Woodford.

Note on Stone-headed Clubs from Malaita, Solomon Islands.

By C. M. Woodford, Local Correspondent of the Royal Anthropological

Institute.

With reference to the Article No. 16 by Baron Anatole von Hügel, which appeared in Man for March, 1908, upon the subject of the so-called chief's maces from the Solomon Islands, the Baron appears to have overlooked the description and illustration of these clubs given in *The Discovery of the Solomon Islands* (London: Hakluyt Society, 1901).

The only place of origin of these baton-shaped clubs is well known to be the south coast of the Island of Malaita, near the entrance of the Maramisiki Passage; in fact the very locality where they were observed by the Spaniards more than 300 years ago. I regret to say that they are now being manufactured for sale to tourists and curiosity hunters. The stone heads of these clubs or maces are generally formed of a ball of pyrites, which occurs plentifully in nodular form in parts of the Island of Malaita. It was the glittering appearance of the pyrites in the heads of the clubs which led the Spaniards to suppose that they contained gold.

From enquiries on the spot I have ascertained that they are known as "Haukari." The name of the nodular stone head being "hau," and of the ornamented handle "lariau." Their use is said to be in connection with dances, but a superstitious value is also attached to them, and they are supposed to give power to the bearer when carried in war. They are carried suspended round the neck, the head uppermost and the staff depending down the centre of the back. A string, fastened just below the head of the club with a loop at one end and a toggle-shaped button of pearl shell at the other, is used to carry them in this position. I gave a genuine specimen some years ago to Lord Amherst of Hackney with such a string and toggle attached.

Mr. Basil Thomson, the editor, with Lord Amherst, of the work above quoted, supposed these clubs to have some connection with the stone-headed clubs from New Ireland, and introduces an illustration (loc. cit., p. 182) in support of his supposition, which, on the contrary, conclusively shows that they have not the remotest connection with one another. Equally unfounded is his supposition that they have any connection with the stone-headed baton clubs from Rennell and Bellona Islands (loc. cit., p. xl., note). They are of a totally different type. The inhabitants of these two islands are pure Polynesians and have no connection whatever with the Melanesian inhabitants of the Solomon group.

Of these Rennell and Bellona clubs I only know of the existence of three specimens. One of these is, I believe, figured in Edge-Partington's Album, and is, I think, in the museum at Christchurch, New Zealand; another is at the Church House, Westminster; and a third is at present in private hands, but may eventually come into my possession, in which case it is destined for the British Museum.

CHARLES M. WOODFORD.

## England: Archæology.

Sturge.

# The Polished Axe found by Canon Greenwell in a Flint Pit at Grime's Graves. By W. Allen Sturge. 92

It recently came to my knowledge that a section of prehistoric archæologists had arrived at the conclusion that the polished axe found in one of the galleries of the pit at Grime's Graves explored by Canon Greenwell, F.R.S., in the year 1870° was a forgery; or, if a genuine axe, that it had been placed in the position in which it was found by one of the workmen engaged in the excavations. Upon this alleged fact it has been sought to base a theory that prehistoric flint pits like those at Grime's Graves, Cissbury, and elsewhere, belong to a very early period of the neolithic civilisation; or that they may even date from pre-neolithic times. The presence of a fine polished axe in the only pit at Grime's Graves hitherto explored would put an end to any such possibility, and as the theory has recently been published in an antiquarian periodical, together with a definite statement that the axe had been surreptitiously introduced into the workings by modern workmen, it seemed worth while to investigate the matter as fully as was possible after so long a lapse of years. I therefore entered into correspondence with such of the prehistoric archæologists as

I knew to have accepted this statement, with a view to ascertaining the grounds on which the idea of mala fides on the part of the workman was founded. Without going into details I may say that I found that there was not one tittle of evidence in its favour. It turned out that the whole matter entered into the category of the old story of the "Three Black Crows." The origin was finally traced back to an expression of opinion on purely esoteric grounds that the axe ought not to have been found there. After the usual fashion this expression of opinion, having passed from mouth to mouth a certain number of times, had crystallised into the definite statement that the axe had been placed where it was found by a workman who had since confessed his misdeed.

Happily we still have Canon Greenwell with us, and the next thing was to apply to him for his account of the find. He kindly sent me the following statement :-" I had never heard until I learned it from your letter that any doubt had been cast " on the finding of the stone axe in the gallery of the pit at Grime's Graves. As it is " desirable that such a report should be shown to be without the slightest foundation, " I may as well tell you the true story of its discovery. As you are aware, the " greater part of the excavation of the chalk in the pit and the galleries connected " with it was made by a pick fashioned out of the antler of a red deer, of which " I found seventy-two in the filling-in of the pit and its galleries, the only one I " opened of the large number existing at this place. I may explain that when one " pit or gallery had been cleared out and the stratum of flint removed, it was filled in " with the chalk excavated in making another pit or gallery. The sides of these " workings were covered with the marks made by the point of the picks, and nothing " was seen except these pick marks until the filling-in had been removed about " half-way along one of the galleries. I then saw among the pick marks a clean " cut, and I immediately said, 'They are using a stone axe.' As the work went on " I observed that the cut became less sharp, when I said, 'The axe is becoming blunt,' " and shortly after, seeing that the cut had become a little shorter at one end, I told " the workman that a piece had been broken off the edge of the axe. A day or "two afterwards one of the workmen came up from below to where I was sitting " with some visitors at luncheon, and said to me, 'We've found him.' Said I, "'Found him; who have you found?' To which he replied, 'Grime.' I had " chaffed the men, telling them that some day when they were at work Grime would " make his appearance and polish them off. I at once went down the ladder to the " bottom of the pit, and along the gallery up to the face of the filling-in they were " removing. 'Where is Grime?' said I, thinking they had found a skeleton. 'There,' " was the reply, pointing to a place about half-way up the face. On looking I saw "through the broken chalk a dark-looking object, the nature of which was not " apparent, but I saw at once that my hope of getting a skeleton was not to be "fulfilled, as it was evidently not bone, which would have been cream-coloured. " I then had the intervening broken chalk removed, when to my great delight a " ground axe of basalt or some similar rock made its appearance, and on examining " it I found it was the identical axe with which the marks had been made, with a " blunted cutting edge, and with a small piece broken off one corner. It fitted " exactly into the marks on the gallery sides, and was without the slightest doubt " the tool with which some of the work of excavation had been done. It is now " in the British Museum with the other things I found in the pit I opened. I daresay " if you visited the place (I believe the pit and galleries are still open) you might " find the cuts made by the axe still remaining. I think this will set at rest the " story that it was made by one of my workmen, who pretended he had found it " among the chalk in the pit."

By a somewhat fortuitous circumstance and à propos of a wholly different matter, I recently had an interview with the sou of the principal workman engaged in opening

the pit at Grime's Graves for Canon Greenwell, nearly forty years ago. In the course of conversation the man spoke with pride of the fact that his father had worked for Canon Greenwell. I showed him some of the red deer autlers which had been used as picks in excavating the pits. "Yes," he said, "but that wasn't all, for they "found a granite battle axe that had been used also for excavating." Upon this I carefully questioned him, and it was perfectly evident that no such idea had ever crossed his mind as that the axe was not genuine, both in make and position. Finally I put it point blank to him whether he had ever heard that the axe had been introduced surreptitiously by any of the workmen. He expressed the greatest surprise, and said such a thing was quite impossible. He had heard the whole story of its being found over and over again from his father, and there never had been the slightest doubt thrown upon it.

Finally, by the courtesy of Mr. C. H. Read, I have had the advantage of inspecting the axe itself. It is exactly as described by Canon Greenwell. There can be no possible question of the authenticity of the axe, nor of the contemporaneity of the breaks of the edge with the general surface of the implement.

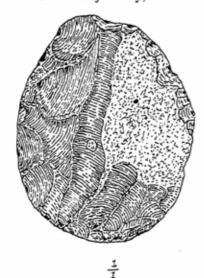
W. ALLEN STURGE.

## England: Archæology.

Dutt.

New Palæolithic Site in the Waveney Valley. (Cf. Man, 1908, 19.)

A few months ago I drew attention to the discovery of a new paleolithic locality in the Waveney Valley, and there appeared in Man, 1908, 19, a drawing of a small



flint implement which had been found on the new site. In my note on this discovery I mentioned that although two careful students of stone implements agreed with me that the implement was undoubtedly palæolithic, the late Sir John Evans was disinclined to accept it as such, because in his opinion "its workmanship was not in "accordance with that of the implements of that "age."

Feeling that while so great an authority had his doubts in the matter the evidence of a single implement from the new locality could not be considered conclusive, I paid two or three visits to Bungay, where the gravel pit is situated, and in June of this year I was fortunate enough to obtain from it the well-worked implement, of which I enclose a drawing. Like the specimen first discovered, it is made of an artificially detached outer flake of flint, and a small portion of the

crust of the flint remains on one side of it; but it differs from the first specimen in being oval in shape instead of pointed.

The drawing gives a very good idea of the character of the flake-work of the implement, which, although the crust is gravel-stained, appears to have received a partial white weathering of its facets on the figured side before it became embedded in the gravel. Dr. W. Allen Sturge agrees with me that it is undoubtedly palæolithic; so I think it may be considered definitely settled that the Bungay gravel pit is a new palæolithic site. As the pit is not used now, in consequence, I understand, of its proximity to a golf green, it is not very likely that many other implements will be obtained from it; so the question whether the pointed or the oval be the pre-

dominant type of implement represented there will probably remain undecided. It is interesting to note, however, that neither of the implements which have been found there bears any resemblance to the much larger and well-marked types characteristic of the only other known paleolithic locality in the upper part of the Waveney Valley, the classic locality of Hoxne.

W. A. DUTT.

## REVIEWS.

India: Assam.

Lyall.

The Mikirs. By Sir C. Lyall. London: Nutt, 1908. Pp. xvii + 183. 22 × 14 cm. Price 7s. 6d.

Sir Charles Lyall has discharged with admirable fidelity the difficult task of editing and reducing to the officially prescribed order the valuable notes collected among the Mikirs by his friend the late Mr. Edward Stack, a civilian of brilliant promise, whose name is still remembered and honoured in Assam. To these notes are added many most useful notes and comments graced by rare scholarship, and in particular, in the section which deals with the affinities of the Mikirs, long a difficult problem, ample use has been made of the materials contained in the volumes of the "Report of the Linguistic Survey of India," in which the Tibeto-Burman dialects are discussed. The book is handsomely illustrated, has a good index, and a useful map, so that the information which it contains is placed before us in as convenient a manner as possible.

The Mikirs are remarkable for their homogeneity and peacefulness, traits which mark them out from the mass of their linguistic congeners in Assam, Nagas, and Kukis whose internecine feuds have drawn upon them the attention of Government on many occasions, with the result that by comparison more is known about the turbulent tribes than the unoffending Mikirs, who pay revenue demands promptly and do not raid their neighbours for heads. They now inhabit the low hills along the boundary of the Nowgong District, whither they migrated in the middle of the eighteenth century to escape the oppression of the Khasis on the Jaintia or eastern side of the Khasi Hills. At an earlier period they seem to have lived close to the Barail range, where they suffered on the one side from Naga tribes, such as the Angamis and the Kabuis, and on the other from the Kachari kings of the Dimapur area. What, therefore, is remarkable is not that their customs should show signs of Khasi influence, but that that influence should not have been much greater. Sir Charles Lyall has succinctly summed up the points in which he traces Khasi influence (p. 152). So far as the language is concerned its structure is on the lines of the general run of Tibeto-Burman dialects, with one notable exception to which I will refer later, but which, whatever its origin, cannot be attributed to Khasi influence. In the section on divination and magic (p. 35) Sir Charles Lyall offers the opinion that divination by egg-breaking is "evidently borrowed from the Khasis." But there is evidence that the practice is found among other Tibeto-Burman tribes in Assam. Brown ("Statistical Account of Manipur," p. 28) says that among the Kabui Nagas "egg-breaking as among the "Khasia tribes is also practised." Lewin, in his account of the hill tracts of Chittagong (p. 98), records the custom of taking omens before marriage by means of the interior of an egg as in vogue among the Bunjogees. Eggs are used by Kukis in curing sickness, and though the evidence is not clear, yet I suspect that the eggs are used in order to divine the nature of the spirit which has caused the sickness. It is impossible to accuse the Bunjogees of borrowing this custom from the Khasis, among whom the practice is very elaborate and systematic. It is also interesting to find a parallel to the akemen or ripe marriage of the Mikirs (p. 18) among the Tipperah tribes (see Lewin, op. cit., p. 81 et seq.). A sojourn in the father-in-law's house is a sociological fact of considerable importance, and the addition to it of a ceremonial tabu against formal intercourse with the bride on the wedding night is a feature which distinguishes the Tipperah custom from that of the Mikirs.

A considerable portion of the book is devoted to an interesting study of Mikir grammar, the most remarkable feature of which is the negative formation of the verb. The use of a negative suffix is common enough in Tibeto-Burman dialects, but the repetition of the consonant or consonantal nexus, if the root begins with a consonant or nexus of consonants (p. 85), is unusual, and, so far as my researches go, is peculiar to Mikir. Like all languages which primarily consist of monosyllables (whether originally or as the result of a long process of detrition is immaterial), Mikir has to make use of some one of the familiar methods of differentiating between homophonetic monosyllables. With numerals generic determinatives are used, while with verbs, in some cases, constant supplements are used, the proper employment of which must, as Sir Charles Lyall remarks, be very difficult to master. There are apparently no traces of any system of tonal modification. Mikir rejoices in a unique word for water, for while in most Tibeto-Burman dialects the word for water is some variant of the root chhu, such as tui, dzu, &c., in Mikir it is lang. Another word of interest as peculiar to this language is the word rong for village, which Sir Charles Lyall connects with the Burmese word rwa. The whole of the latter part of the section on the affinities of the Mikirs is devoted to a thorough examination of the classification put forward in the "Linguistic Survey of India Report," Vol. III., Pt. II., p. 379, which assigned the Mikirs to a group intermediate between Bodo and the Naga dialects, with the result (from which on the evidence so skilfully marshalled and set forth it is difficult to differ) that Mikir is intimately connected with the Kuki Chin group of languages. Among many valuable portions of this section it is necessary to mention in particular the conclusions at which Sir Charles Lyall has arrived in regard to the phonetic changes which occur in Mikir. We may not yet be able to formulate a law of interchange, but work of this kind will help us to it. T. C. HODSON.

# Economic History.

Hahn.

Die Entstehung der wirtschaftlichen Arbeit. Von Dr. Ed. Hahn. Heidelberg: Winters Universitätsbuchhandlung, 1908. Pp. iv+109. Price 2.50 mks.

Synthetic work in anthropology is very far from keeping pace with the accumulation of materials. In so far as the latter work is more urgent in view of the rapid changes there are coming over non-European races, this is excusable and even necessary. At the same time it should not be overlooked that, especially in England, by far the greater proportion of observation of native races is furnished by observers who are not even partially trained, and consequently furnish us with no data on many points that do not lie on the surface. Even facts the observation of which calls for no special gifts escape being recorded, teste the noteworthy absence of data on primitive economics in the average English work on races in the lower stages of culture; and this though economics is far from being an unpopular subject in England as things go.

If English observers are not interested in the economics of primitive peoples, English anthropologists are equally behindhand. The economic history of the world has yet to be written, and such contributions as are made to the study by primitive races or conditions are mainly due to Germany and France. It is but yesterday since Dr. Hahn overthrew the venerable error that man has been in succession hunter, nomadic herdsman, and cultivator.

The present work is largely ethnological with a dose of social reform propaganda; the net result is, however, by no means incongruous, and as a whole the booklet is interesting and stimulating. The author reviews his previous thesis as to the economic development of mankind, the important share of woman in the domestication of plants, her position among many primitive peoples as main or even only provider of food, her subordinate social rôle, and so on. The conclusion which he draws is that greater economic freedom for woman in the present day is to be sought in the direction of making her the legal owner of what she can earn.

Much of his anthropological material is drawn from the Australian: but it is unfortunate that Dr. Hahn has not laid Dr. Roth's Bulletins under contribution. There is little to support his view that the beginnings of cultivation in Australia are due to imitation of the whites. Yam culture was found fifty years' ago by Gregory in West Australia, then almost untenanted by Europeans, and it was clearly of native origin. It is not correct to say that the Australian did not build houses; both in the north-west and south-east huts were solidly constructed, and it is only in certain areas that temporary erections only are known.

The proposition (p. 34) that the male in the lowest-known stages of culture does virtually nothing, or that he at most does a little hunting, and gives wife and children part of his booty, is an unfortunate exaggeration. In Australia there are elaborate rules as to the division of game, and both there and elsewhere the capture of fish is in large measure the task of the males. Generalisations of this kind are reliable and useful only if they are supported by adequate evidence. Dr. Hahn has drawn many of his facts from Australia, and it is curious that he should not have realised that the sexes share the task of providing food.

N. W. T.

## PROCEEDINGS OF SOCIETIES.

## British Association.

Anthropology.

Anthropology at the British Association, Dublin Meeting, September 3-9, 1908. (Continued from Man, 1908, 87.)

## ARCHÆOLOGY.

NINA F. LAYARD.—Notes on an Ancient Lind Surface in a River Terrace at Ipswich, and on Palæoliths from a Gravel Pit in the Valley of the Lark.—At the junction of the river Gipping with the estuary of the Orwell gravelly sands are superimposed on the original red river gravels but separated from them by a black band varying in thickness from 3 inches to a foot. This band represents an old land surface which is largely composed of decayed animal matter. In this band the following remains have been found: teeth and bones of a large horse, bones and antier of red deer (Cervus clephus), large tusk, tooth and bones of mammoth, bones of Bos primigenius, teeth and part of jaw of wolf (Canis lupus), proximal end of radius of bear with part of a claw, part of the sternum of a bird, and the shaft of humerus of an herbivorous mammal which has been gnawed. Flint implements were discovered in connection with these remains: a well-worked scraper with a number of flakes, and two small pointed tools of the Abbeville type. These remains were fully 30 feet below the present surface.

The implements from the valley of the Lark were mostly found at a depth of 18 feet, in coarse gravels which are in some parts of a deep red colour, in others inclining to light yellow. The tools are much rolled and many have a whitish patina. Comparing these palæoliths with those found at Foxhall Road, Ipswich, the most notable differences are the generally rougher workmanship, and the prevalence of flint cores of considerable size, from which knives have been struck. No examples of these cores from East Anglia are included in the British Museum collection, and they do not appear to have attracted much attention in England. Comparing them with the cores from Pressigny and the banks of the Indus in Upper Sindh it will be seen that the examples from Suffolk are of a much rougher type. Should it be found that cores are usually

absent from sites which produce flint tools of the Foxhall Road type, it may be possible to recognise a distinction between knife-making tribes and tribes which had not discovered the art of making long blades.

George Clinch.—On the Classification of the Megalithic and Analogous Prehistoric Remains of Great Britain and Ireland.—Some reasonable and convenient classification of megalithic and related remains is urgently required because of—

- (1) The existing confusion of ideas as to the different types; and
- (2) The special need of some common method of classification in view of the Government's promised action with reference to the "historical monuments" of England.

The classification suggested aims at precision combined with sufficient breadth of scope to permit the inclusion of prehistoric dwellings, hillside sculptures, and other antiquities not already included in the scheme of the Earthworks Committee of the Congress of Archæological Societies. [Liverpool Annals of Archæology and Anthropology.]

Report of the Committee to ascertain the Age of Stone Circles.—The committee this season began excavations at Avebury, confining their attention to the ditch. This was found to be extraordinarily deep. In the ditch were found a good stratification of pottery from mediæval to prehistoric times, and on the chalk at the bottom were discovered picks of deer antlers, similar to those at Cissbury and Grime's Graves. The excavations so far tend to show that the age of the circle is late Neolithic or early Bronze Age, but further exploration is necessary before this opinion can be considered as proved.

J. Grav, B.Sc.—Who Built the British Stone Circles?—Closely associated with dolmens and avenues in Britain, there are three leading types of circles, namely, the Dartmoor, the Aberdeenshire, and the Inverness types, the simplest forms being found in the south.

The distribution of stone circles in Britain could be simply explained if we could assume that the race who built them first settled in Cornwall and Devon, then migrated up through Wales, Lancashire, and South-West Scotland, as far as the mouth of the Clyde, from thence across the midlands of Scotland to the mouth of the Tay, then north along the east coast, through east Aberdeenshire, turning west to Inverness, and after that north through Caithness to the Orkney Isles and Lewis.

The physical characters of the race with which the stone circles are associated are unique. It is demonstrable from available data that this race, which is assigned to the early Bronze Age, differs from all the other prehistoric races found in Britain; it also differs from the prehistoric races of Sweden, Denmark, and Switzerland. Since the physical type of North-West Africa excludes the probability of immigration from this region, we would appear to be driven to seek the original home of these people in some region of Asia which the present state of our knowledge does not enable us to identify with certainty. It is interesting to note, however, certain indications of affinity with the ancient people of South-West Asia. [Nature.]

REV. H. J. DUKINFIELD ASTLEY, M.A., LITT.D.—Cup- and Ring-Markings.—These marks are of wide distribution, archaic examples being found on megalithic monuments, the stones of chambered tumuli, stone kists, and on rocks and boulders in many parts of Great Britain, in Ireland, on the Continent in France, Spain, Italy, and Scandinavia, in China, India, and in North and South America. As examples among modern savages may be instanced those found in Australia, in Fiji, Easter Island, and other parts of the Pacific, as well as certain parts of Africa.

It was suggested that cup- and ring-marks are connected with totemism, being analogous to the designs on the *churinga* of the Arunta, and are to be assigned to a similar process of primitive psychology.

The Lake Village at Glastonbury.—Tenth Report of the Committee.—The examination of the entire site comprising the Glastonbury Lake Village was completed in 1907, and during the past year an exhaustive description has been in course of preparation.

During the past summer tentative explorations have taken place at another Lake Village site at Meare, situated between two and three miles west of the Glastonbury Village. The existence of this site has been known to Mr. Bulleid since 1895, but the Glastonbury excavations being in progress no examination was attempted until this year.

The Meare Lake Village lies on the peat moor to the north side of a low ridge of ground, on which the village of Meare is built, and from 400 to 600 feet south of the River Brue.

The tract of land in this neighbourhood was at one time occupied by Meare Pool, a body of water which, in the early part of the 16th century, was five miles in circumference. All traces of this lake have disappeared owing to drainage, and its position is now represented by fertile pastures.

The Lake Village consists of two distinct groups of eircular mounds, separated by a level piece of ground about 200 feet in width.

The site covers parts of five fields, and measures some 250 feet in width north and south, by 1,500 feet in length east and west.

Tentative excavations show that the mounds were constructed on similar lines to those at Glastonbury.

George Coffey.—The Distribution of Gold Lunulæ.—Of the known examples of this most characteristic of Irish gold ornaments, sixty have been discovered in Ireland itself, six in France, four in England, four in Scotland, two in Denmark, and one each in Wales and Belgium. They may be dated provisionally, between 1200 and 1500 B.C.

George Coffey.—The Survival of La Tène Ornament in some Celtic Penannular Brooches.—The date of these brooches can be safely claimed as not later than A.D. 700, from the complete absence of any trace of interlaced ornament on them as well as from the many La Tène clements surviving in their decoration. Many of them are no doubt earlier, and may antedate the coming of St. Patrick. All are of bronze, but the enamels with which they are decorated have disappeared.

George Coffey.—Note on the Tara Brooch.—The particular feature of the brooch with which the paper dealt, and which had not previously been noticed, was that the fine wires of the interlaced patterns, of the central interlacements and of the bead of the pin have a minute granulation which is hardly apparent to the naked eye.

- E. C. R. Armstrong.—A Leather Shield found in co. Longford.—The shield, which is circular, was found in June of this year in a peat bog. It is made of a solid piece of leather, and is  $20\frac{1}{2}$  inches in length and  $19\frac{1}{2}$  inches across. It has an oblong central boss, which has been pressed out of the leather and furnished with a cap composed of a finer leather, laced on to the boss. The face of the shield is ornamented with three ribs, between which are small bosses in sets of three, recalling the decoration of the bronze shields. The back of the shield is furnished with a leather handle. That the specimen is not the leather lining of a bronze shield is clear from the thickness of the leather and the lacing of the boss. It is of the same type as the bronze shields common to Upper and Western Europe.
- G. H. Orden.—The Origin of Irish Motes.—Ireland offers some advantages over the sister island as a field for the study of motes, as, from the known history of the island, the peoples to whom the erection of its motes can be ascribed are practically reduced to three, viz., the Celtic tribes, meaning thereby the race or races that exclusively occupied Ireland prior to the Scandinavian invasion of the 19th century;

the Scandinavian invaders themselves; or the Normans, who first came to Ireland in 1169. Thus the Romans and the early Saxons, Angles, and Jutes, are excluded.

As to the hypothesis of a Celtic origin, the local distribution of motes is impossible to explain on any theory which would ascribe them to the Celtic tribes generally. There is no mention in early Irish documents of an artificial mound as forming part of a Celtic fortress. At the time of the coming of the Normans the Irish had few or no castles, and there is no account of the siege or assault of any Irish castle. The only other hypothesis of their origin is one that would ascribe their erection to very early and even to prehistoric times.

The hypothesis of a Scandinavian origin of Irish motes, though once widely held, is now discredited. Motes have not been observed in the countries from which the Northmen came, and are non-existent or rare in many parts of Ireland, which appear to have been specially occupied and dominated by them.

As regards the remaining hypothesis that motes were erected by the Normans at the close of the 12th century and beginning of the 13th, the following are the principal facts and inferences which, in the writer's opinion, establish it:—

The Normans are known to have adopted this type of fortress in the 11th century. When the Normans came to Ireland the mote fortress suited the conditions of their warfare. There is contemporary documentary evidence that the Normans did erect certain motes in Ireland. Upwards of 80 per cent. of the probable sites of the castles known to have been erected by the Normans prior to the year 1216 included a mote. The distribution of the motes in Ireland, so far as it can be ascertained, is completely explicable on the hypothesis that they were raised by the Normans. The vast majority of these motes has been shown to be situated at early manorial centres. In many cases the remains, or at least foundations, of stone towers and other defences exist, or can be shown to have formerly existed, on the summit of the motes or in the attached base-courts, and these seem to have been the work of the Normans or of their Anglo-Irish successors, and to have taken the place of the original wooden defences.

Dr. R. F. Scharff.—Some Remarks on the Irish Horse and its Early History.

—The most complete remains of the horse discovered in Ireland were obtained by Mr. George Coffey in the Craigywarren Crannog, county Antrim. The human implements and weapons found with them imply that the occupation of the Crannog dates back to early Christian times. The horses were then no doubt domesticated. Their resemblance to the Arab type of horse is quite as striking a feature as that in the modern Connemara pony.

The remains from a tumulus and from Irish bogs, marls, and caves in the Irish National Museum are less complete, but they all indicate that in still more remote times a small race of horse, apparently similar to that of the Craunog period, lived in Ireland. It is important to note that some of these remains probably belonged to wild races.

The available evidence seems therefore to support the view that the resemblance of the modern Connemara pony to the Eastern or Libyan race of horse is not entirely due to human introduction of foreign stock, but to the fact that the wild horse of Ireland possessed the same characteristics as the latter, and transmitted them to the existing ancient domestic breeds.

PROFESSOR JOHN L. MYRES.—The Work of the Liverpool Committee for Excavation and Research in Wales and the Marches.—The Liverpool Committee for Excavation and Research in Wales and the Marches was instituted in October 1907, with the object of co-operating with existing agencies for the investigation of the early history of the Welsh people, with special reference to the effects of the Roman occupation of Wales, and of the non-Roman invasions which terminated and succeeded that occupation.

The work of the Committee for the current year has been confined to the conduct of a preliminary survey of a few districts of Wales which have not yet been undertaken by any local society, and to tentative excavations on sites which seem likely to deserve more thorough examination in the near future. Such, for example, is the excavation of the Roman site of Caerleon, of which a summary is given separately by Mr. H. G. Evelyn White.

H. G. EVELYN WHITE.—Excavations at Caerleon, Monmouthshire.—Excavations have recently been carried out at Caerleon on a piece of land lately added to the churchyard. As "quarrying" has been actively pursued on the site, a ground plan could only be recovered by following mere foundations at a depth of 4 or 5 feet. The area excavated, judging by analogy, is apparently the site of the "principia."

Among the finds were a broken tablet bearing the inscription-

## DEO MERCURIO AVR DD SEVER P

an amphora handle with the graffito, in cursive letters, AMINE, and a few coins, chiefly of the Constantine family, but including one each of Carausius and Trajan.

The value of the excavations consists in the recovery of the ground plan, especially as this is the first fragment of the interior arrangements of the camp which has been discovered. [Liverpool Annals of Archæology and Anthropology.]

DR. R. Newstead.—Recent Excavations at Roman Chester.—During the demolition of some property a section of the Roman wall was discovered. This is by far the most perfect portion yet found in Chester. The total length of the wall as at present recovered is 56 feet 10 inches. It is built of ashlar, consisting of seven courses of masonry laid in very regular and for the most part closely-jointed courses. The ashlar work is backed by rubble work, coursed more or less to correspond with the masonry. Large quantities of soil were used to fill in the cavities between the masonry and the rubble work. The foundations were deep and were built of rubble similar to the inner lining of the wall. Behind the rubble facing of the wall was found a solid bank of stiff clayey loam, which was probably at one time supported by masonry or stonework. The fosse was not of the usual V shape, the bottom being broad and flat. [Chester Arch. Soc.]

T. Ashby, M.A., D.Litt.—Excavations at Caerwent, Monmouthshire, on the Site of the Romano-British City of Venta Silurum in 1907-8.—Of the excavations up to August 1907 an account was given at the Leicester meeting. The rest of the campaign of 1907 was devoted to the exploration of the basilica and forum, with the exception of the western portion of both, which lies beyond the limits of Lord Tredegar's property. It was possible to recover the plan of the whole block, which, surrounded by streets on all four sides, formed one of the twenty insulæ into which the town was divided, and it corresponds closely with that of the forum of Silchester, An interesting feature is the large drain which carried the surface water off the open area under the basilica and away to the north. The season of 1908 was devoted to the continuation of work in the insula, to the east of the forum, to the south of a large house, numbered VII<sup>N</sup>, excavated in 1906. Remains of several private houses and some rubbish pits were found, one containing a peculiarly hideous seated statuette of a female deity.

DR. HAAKON SCHETELIG.—The Sculptured Stones of Norway and their Relation to some British Monuments.—The sculptured stones of the Viking Age in Norway are not very numerous, but are of great interest, as showing several different types. The standing stone of Kirkeide, in Nordfjord, is covered with symbols: the comb, the serpent, the group of four concentric circles, the crescent, and the radiated sun disc, which are all found also in the early Christian monuments of Scotland. It is a proof of

direct communication between Scotland and Western Norway about A.D. 700. Another stone in the same district bears a ship figure only, and probably shows an influence from Gotland during the same period, viz., about A.D. 700. Such connections between Gotland, Western Norway, and Scotland have been suggested already by the late Prof. Sophus Bugge, from some peculiarities in the form of the runes. Mr. Jacobsen has come to the same conclusion from Norwegian names of places in Shetland. Thus we see that direct communications between Britain and some parts of Scandinavia were opened at a time not a little earlier than the Viking expeditions recorded in history. A stone from Tu, in Jacderen, bears a runic inscription and simply carved representations of a man and a woman. By comparing them with a certain type of small gold leaves, impressed with figures, it is made out that they represent a mythical scene, probably personifications of the sun and the earth (Frey and Gerd). This monument must be assigned to the first part of the Viking Age, as its runes show the same peculiar character as the runes of the Norwegian crosses in the Isle of Man. Its figures may also have been influenced by the sculptures of that island.

The sculptured stones of the early Christian time are chiefly found in the eastern parts of Norway; they are of a more ornamental character.

N. Gordon Munro.—Prehistoric Archæology in Japan.—During the past quarter of a century the observations of Japanese and foreign investigators have enabled some general conclusions to be made. Features not shared by other cultures have been isolated, while the resemblance of culture vestiges to those of other lands agrees with the general verdict of prehistoric intercommunication. Here also the great number of crude stone implements and the persistence of horn and bone harpoons of paleolithic form suggest a direct survival from the earlier culture, while some indications of an evolution are present. But no remains of undeniably paleolithic status have been found. Excavations of shell mounds and other neolithic sites in Japan have revealed some connection between the pottery of this phase and that of the iron culture which accompanied the agricultural invaders from the mainland of Asia. These formed the core of the present Japanese nation. The neolithic inhabitants were gradually driven to the east and north, but miscegenation took place to a greater extent than is generally supposed.

The discovery of Ainu remains in the shell heaps and underlying soil proves that this people played a part in the neolithic culture.

The characters of the dolmens and other vestiges of the Iron phase, and the incidence of the former with the neolithic sites, favour the view that the progress of the invaders towards the east and north was slow, and might have commenced about five centuries B.C. or even earlier.

## ANTHROPOLOGICAL NOTES.

THE death is announced of Dr. Stephen Wootten Bushell, C.M.G., who for many years was physician to the British Legation, Pekin, and who was an eminent authority on Chinese porcelain. His handbooks on this subject, published for the Victoria and Albert Museum, are well known.

It is satisfactory to learn that a Royal Commission, with Lord Burghelere as chairman, has been appointed for the purpose of scheduling the ancient monuments of England from the earliest times down to 1700, and of deciding which are worthy of preservation. Commissions of a similar nature for Wales and Scotland have already been appointed.

Mr. N. W. Thomas, M.A., has been appointed Government Ethnologist to Southern Nigera, and leaves England shortly to take up his duties.

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FROM AN ANGLO-SAXON MS. IN THE BRITISH MUSEUM.



PANEL FROM FRANKS CASKET, REALE MUSEO NAZIONALE, FLORENCE.

THE ANIMAL-HEADED FIGURE ON THE FRANKS CASKET.

# ORIGINAL ARTICLES.

Folklore.

## With Plate M.

Dalton.

The Animal-Headed Figure on the Franks Casket. By O. M. Dalton, M.A., F.S.A.

The perplexing subject upon the bone panel at Florence, which originally formed the right end of the Franks Casket in the British Museum, still remains a matter for controversy.\* Perhaps the most generally accepted interpretation is that adopted by Wadstein, who connects it with the Sigurd (Siegfried) Saga. On the right-Brynhild urges Gunnar and Hagen to the murder of the hero; in the middle is the tumulus, with Siegfried's body visible within, and the faithful horse, Grane, mourning above it; on the left Grane, now with a human body, sits upon the tumulus with the murderer, Hagen, standing before him.

It is with the interpretation of this left-hand portion of the panel that the present note is concerned. The version which has just been quoted does not explain the episode very satisfactorily. Dr. Imelmann† has, therefore, asked with some reason why Grane should be repeated at all, and, if repeated, why he should be authropomorphic in one place and purely animal in another? There are difficulties in the way of his own interpretation, in which he develops a suggestion made by Holthausen; but it raises points of anthropological interest, and may, therefore, be fitly presented to readers of Man. Dr. Imelmann thinks it possible that the figure with the horse's (or ass's) head and human body may represent a metamorphosis. The chief objection to this lies in the fact that the group on the left must then be regarded as detached from the episodes occupying the rest of the panel as at present interpreted.

Representations of men with animals' heads are comparatively frequent in early art. They may be roughly divided into four classes. Firstly, there are animal-headed deities, such as the Anubis or Seth of Egypt; secondly, there are the wearers of masks; thirdly, the figures illustrating ancient travellers' tales; lastly, there are bewitched persons. It is with the last of these classes that we are here principally occupied. The superstition that the personality of a man may pass into an animal form is of immense antiquity, and examples of its occurrence might be quoted from all parts of the world. We have here only to consider the prevalence of the belief as it may have affected the maker of the Franks Casket.

In the earlier centuries of the Christian era witches were as real to popular belief as at any other period before or after, and their power of changing either themselves or others into beasts and birds was a favourite subject in popular literature and drama. The powers attributed to Circe passed to the Moeris of the Eclogues and were transmitted to the Pamphilé of the Golden Ass. The results obtained by all these witches were the same, but their methods varied; instead of the insidious draught or the poisonous herb they often used a magical ointment, the effects of which could only be cancelled by eating some particular kind of leaf or flower. In the romance of Apuleius the transformed Lucius only regains his human shape by snatching a meal The northern Sagas had also their were-wolf warriors, similar to the man-lions, human leopards, and ape-men of primitive fancy. There is, therefore, no reason why a metamorphosis should not be represented in the Northumbrian art of the eighth century, and it may be noted that the creature upon the casket appears to be eating, at the same time holding a branch in one hand. It may, however, seem strange that the figure should be partly man and partly beast, instead of being wholly animal. This partial transformation may have been deliberately chosen as a really more effective

<sup>\*</sup> This panel, which had been separated from the rest and purchased by M. Carrand, passed with his collection into the Bargello (Reale Museo Nazionale) at Florence, where it now is.

<sup>†</sup> Zeugnisse zur altenglischen Odoaker-Dichtung, 1907.

method of portraying a dual nature. But it may possibly have been suggested by familiar types of animal-headed men belonging to the other classes mentioned above. The upper figure on the plate, from an eleventh century Anglo-Saxon manuscript in the British Museum,\* represents a creation of the fantastic anthropology handed down through Pliny and Ælian to the earlier middle ages. It is described as a cynocephalus with a dog's head, horse's mane, and boar's tusks, a hot-blooded monster breathing fire and flame. The idea of such a type may well have unconsciously influenced the artist when he came to draw a man who had been bewitched.

There is another source from which a similar suggestion may have been derived, and that is of the Mime of the Ass. The Golden Ass of Apuleius was doubtless based upon this mime, which was one of the most popular of those performed in the market places of the Roman Empire both in the East and in the West. In the performance, the impersonator of the ass-man went upon two legs and wore only a mask in the form of a donkey's head; he is so seen upon a fragment of red ware found in Italy and dating from the first century A.D. There seems reason to believe, as Dr. Hermann Reich has shown,† that degenerate forms of this mime persisted through the Middle Ages; and that "the man with the ass's head" may have been seen in the fairs of European cities down to the sixteenth century. Shakespeare himself, who had probably read the Golden Ass, may have seen or heard of the popular figure, and Nick Bottom, the weaver, is thus brought into connection with the Lucius of Apuleius. In theory the ass-man of the mime was no doubt supposed to have assumed the whole physical nature of a donkey, but we learn from the pottery fragment that for representative purposes the long-eared head was considered a sufficient mark of identity.

It appears, therefore, that there is more than one way in which a monstrous figure, partly human and partly animal, may have come to do duty for the complete donkey; and the theory that the episode upon the Franks Casket may have something to do with a metamorphosis is not altogether improbable. But it is always open to the supporters of the older theory to suggest that the artist gave a man's body to the horse Grane simply to emphasise the human sympathy which the noble animal displayed after his master's death. This small problem is perhaps not unworthy of the attention of anthropologists, who are confronted with somewhat similar difficulties in the domains of primitive and barbaric art.

O. M. DALTON.

#### Totemism.

Lang.

# Linked Totems. By A. Lang.

In Mr. Seligmann's interesting paper (Man, 1908, 89) on "Totemism in British New Guinea," it is hard to understand what is meant by "linked totems." They may, we learn, belong to a "clan," a "tribe," or "a division of a tribe." What is exactly meant here (1) by a "clan"? Are we to understand a clan claiming descent from a known or supposed male ancestor, and styled by a patronymic; or a local totem kin of male descent, styled by the name of the totem, and only allowed to marry out of the name? If such a clan had several totems, all exogamous, obviously it would resemble a "phratry," or main exogamous division (the "linked totems" being totem kins in the phratry), more than a "clan." Or are the "linked totems" merely what Mr. Howitt called "sub-totems," and Mrs. Langloh Parker styles "multiplex totems," with no effect on exogamy, and not tabooed as food—that is, not totems, strictly speaking, at all, but possessions classified under each phratry?

(2) What is the distinction between a "clan" and "a division of a tribe"?

<sup>\*</sup> Cottonian Manuscript, Tiberius, B. V., f. 80.

<sup>†</sup> Jahrbuch der deutschen Shakespeare Gesellschaft. Berlin, 1904. Pp. 108 ff. Dr. Reich, reproduces the fragment of Roman figured ware on p. 110.

(3) Can we say that a tribe has a totem, and is the tribe exogamous and named by the totem name? Has such a "tribe" totem kins within it, and if so, is it not a localised phratry?

These points may be cleared up in the forthcoming report of the Daniels Expedition, but meanwhile I confess to being puzzled by the terminology.

I have been told, whether correctly or not, that each Highland clan has its attached vegetable, fish, and beast, as the Campbells have the salmon and the bog-myrtle;

their bird or beast I forget. If the information be correct, the things are not, of course, "linked totems," though they may conceivably descend from a state of things

like that in British New Guinea, whatever that state may be.

It seems plain that the communities with "linked totems" are local communities, but whether they are local totem kins, mixed; or tribes; or even relics of phratries, is not clear. The Marshall Bennet Islands myth of a hole whence "emerged the " ancestors of the clan bearing with them their animal totems" is like the Dieri myth of the emergence of the ancestors of each totem kin from a lake, whence they But how could a "clan" contain primal ancestors of scattered in all directions. several different totems, if by "clan" is meant an exogamous totem kin? The Viara myth, like the Euahlayi, says that the creator (Garuboi, a snake) "separated mankind into clans" (banaga). The banaga, I presume, were totem kins, each exogamous, each with one totem and totem name. We have not here, I think, one "clan" with many ancestors of different totems. If the snake made the earth, how could be be born on Viara, which he had not yet made? It must, like Britannia and Delos, have risen "at Heaven's command," but of such stuff are the dreams of savages made!

I cannot but wish that, in our terminology, the word "clan" were confined to its A. LANG. original meaning.

Seligmann. Totemism.

Linked Totems: a Reply to Mr. Lang. By C. G. Seligmann, M.D. I do not quite realise what is Mr. Lang's difficulty in the term linked totems, or what he means when he says, "If such a clau had several totems all " exogamous. . . . " This sentence seems to imply that Mr. Lang considers that within the unit (clan in British New Guinea; tribe or division of tribe in Fiji) there are groups of individuals, each group having a different totem. And it seems possible that Mr. Lang thinks that I apply the term linked totems to the totems of all these groups within the unit, considered as a single group of totems. But neither Dr. Rivers's note nor M. de Marzan's article seems to me to suggest this, and my note was written to draw attention to essential similarity existing between the conditions which (as I understand their writings) these authors describe from Fiji and those I found in New Guinea. What I mean by linked totems becomes clear, I think, from consideration of Dr. Rivers's article and the table which appears in my note in the last number of Man. The last two lines of this table are a statement in tabular form of the conditions found in Fiji (Rivers; de Marzan) where all the individuals of the unit (tribe or division of a tribe) have a number of totems belonging to different classes of living things. The rest of the table consists of illustrations from southeastern British New Guinea of a similar condition of affairs, the unit here being the clan, and its totems, belonging to different classes of living creatures, are, as I term them, linked totems.

Having, as I hope, to some extent cleared the ground, I will endeavour to answer Mr. Lang's questions as far as it is possible to do this briefly.

(i) In south-eastern British New Guinea the clans are exogamous (there may also be a dual or a multiple grouping of the clans, but I must ignore this here) and descent is in the female line. Clans sometimes bear the name of one of their totems (not necessarily the most important), but this is an exception; usually the clan names are geographical. Every individual of a particular clan has the same linked totems. Over the greater part of the area under consideration the bird totem is the most important of the linked totems and is not eaten; further, the fish totem is not eaten (there may be exceptions to this rule, but, generally speaking, it holds good).

- (ii) I have already given some particulars of the clan as the totemic unit in south-eastern British New Guinea. Mr. Lang must draw his own conclusions from Dr. Rivers's and M. de Marzan's writings how far the clan (British New Guinea), and tribe or division of a tribe (Fiji), differ from each other as to their totems at the present day. To me they seem essentially similar in this respect.
- (iii) The points raised by this question refer only to Fiji, therefore I cannot answer them.

It should now be clear that there was really no reason, as far as my note was concerned, for Mr. Lang to formulate the hypothesis (even if only to destroy it) that a clan might "contain primal ancestors of several different totems."

Finally, concerning the claus created by the snake Garuboi, each had a series of linked totems: of the three clans in the Gclaria community, where I heard this myth, the name of one was that of its totem snake Garuboi; the name of the second was almost certainly geographical, while I failed to ascertain the origin of the name C. G. SELIGMANN. of the remaining clan.

## Africa, East.

Dundas.

Kikuyu Rika. By Hon. K. R. Dundas.

The life of the Kikuyu of both sexes is divided into periods called Rika 101 —sing. Morika.

These are the male Rika:-

- Morika ya Wabai.—The age of young boys.
- 2. Morika ya Laini.—The age up to the time of circumcision.
- 3. Morika ya Mumo.-The age of young warriors (corresponding to the junior warriors of the Masai).
- 4. Morika ya Anake.-The age of the senior warriors, who wear their hair long, reaching down over their shoulders.
- 5. Morika ya Karabai.-The age of the married men.
- Morika ya Kiama.—The age of the elders.

The last Morika is the most important of all; to it belong the elders who administer the law.

No one, who is not the father of a circumcised child, can belong to this Morika, which is divided into two degrees: (1) Morika ya Kiama ya Mbule Omwe; (2) Morika ya Kiama ya Mbule Egeri.

A candidate on being admitted into the first of these two degrees pays one sheep to the elders of the Kiama and two on being admitted into the second degree; hence the names of the two degrees.

Members of the first degree deal with petty offences; those of the second degree with serious offences, such as murder, rape, &c.

The full member may be distinguished by the flat spiral rings of brass wire, which he is henceforth entitled to wear in the lobes of his ears.

When, in the opinion of the elders of the Kiama of the day, the time has come to create a new Morika, a big shauri is held throughout the Kikuyu country, to which none but elders are admitted, and at which vast quantities of meat and drink are consumed.

It being decided to create a new *Morika*, the candidates are summoned before the elders, who recite to them the law (Appendix A.), each clause of which they must swear to obey, for they are now about to become elders of the first degree of the *Kiama*, and will henceforth be required to administer justice.

Thereupon a chief over each division (geographical) is chosen, and the ceremony ends in the consumption of more liquor.

The Kikuyu believe that only ten ages of Kiama have existed since man was first created (Appendix B.).

The following are the female Rika:-

- 1. Morika ya Moireka.-The age of uncircumcised girls.
- Morika ya Moiretu.—The age of girls eligible for marriage.
- Morika ya Mohiki.—The age of married women who have not yet given birth to a child.
- 4. Morika ya Wabai.-The age of those who are mothers.
- 5. Morika ya Mutu Mia.—The age of mothers of circumcised sons.

The last of these ages is distinguished like that of the Kiama by its members being allowed to wear flat spiral rings of brass wire in their ears; those of the women, however, are bigger than those worn by the men.

APPENDIX A.—The following penalties may be inflicted under Kikuyu law:—

For murder, 100 sheep, 4 goats, and a bull.

For adultery, 3 sheep.

For rape, 10 goats and 2 sheep; the latter to be given to the Elders of the Kiama.

For stealing the produce from another's shamba, 2 sheep to the Elders of the Kiama; and to the owner according to the value of the amount stolen.

For striking a man with a knobkerry, 2 sheep; one to the Elders of the Kiama and one to the plaintiff.

For a spear wound, 10 goats to the plaintiff.

For a sword wound, 30 goats and one sheep, called Ngaita, to the plaintiff and 2 sheep to the Elders of the Kiama.

For cutting off a finger, 10 goats for every joint cut off.

For causing the loss of an eye, 100 sheep.

For causing the loss of a hand, 100 sheep.

For stealing honey, 10 sheep.

For killing a snake in another man's shamba, one sheep.

APPENDIX B.—First Generation, Manjiri.—When God had finished making the world, he blew upon a great trumpet, the sound of which could be heard over the whole earth, and at the blast thereof was created the first Morika ya Kiama, called Manjiri, the people of the trumpet.

Second Generation, Mamba.—The Manjiri were the fathers of the people of the Mamba, the ancestors.

Third Generation, Manduti.—After whom came the Manduti, the sinful people. Fourth Generation, Chuma.—After the Manduti came the Chuma, whose name signifies the raiders, a great raid in their country occurring during their lives.

Fifth Generation, Shiera.—The Chuma were succeeded by the Shiera, whose name means a multitude, because during their lives the people increased greatly.

Sixth Generation, Masasi.—After the Shiera came the Masasi, the people of the red earth, who were called thus because in their generation arose the custom of smearing the body with red clay.

Seventh Generation, Endemi.—The people of the seventh Morika were the Endemi, during whose lives the supply of metal for manufacturing swords and knives, which up till then had been very scarce, became exceedingly plentiful.

Eighth Generation, Iregi.—The Endemi begat the Iregi, who fought with the invading Gallas, or Somalis, and drove them out of the country.

Ninth Generation, Maina.—The Iregi were the fathers of the Maina, the dancers, who spent their days in peace and in great rejoicing over the expulsion of the Barabio (Gallas or Somalis).

Tenth Generation, Muangi.—The tenth and last generation to receive a name was the Muangi, which is the name of a people who eat much meat and drink great quantities of beer; before their day it was not the custom amongst the Kikuyu to drink beer.

The present generation, which is the eleventh, is still young and will not become Elders of the Kiama for many years to come.

These are the generations that have lived since God first created man.

K. R. DUNDAS.

## Africa, Central.

Garbutt.

Alphabet Boards. By H. W. Garbutt.

The boards here illustrated were brought down to Bulawayo by natives coming from Domira Bay, Lake Nyasa, British Central Africa. There is some reason







FIG. 2.-SMALLER BOARD.

to suppose these boys were from Zanzibar, at least Zanzibar boys are known to use such wooden "slates".

The slates are provided for the native children to save the wear and tear of printed books, and are an interesting survival of the use of wood from prehistoric times, as described and illustrated in an article entitled "Materials used to write upon before the "invention of printing," by Albert Maire, Librarian of the Paris University, appearing in the Smithsonian Report of the U.S.A. for 1904 (issued in 1905). The illustrations in the article depict—

- Arabic school exercise inscribed on board from the Philippine Islands.
- (2) An attempt at the restoration of the tables of Solon (Azores), Géraud's description.
- (3) Wood tablet with Greek inscription.

The two alphabet boards now described are inscribed with Arabic characters, the smaller board having an inscription on both sides. The three photographs show the two boards and the reverse side of the smaller one. All three inscriptions are identical, each being preceded by a sentence or invocation used as a charm against the Evil One, and reading, "Throwing Stones at Satan, in the Name of the Most Merciful God."

The remainder of the inscriptions, in the case of each board, teaches the different sounds of each letter of the alphabet just as in a primer used by very young children.

In English the sounds here represented may be expressed by the words—

- " Ah, Ay, Oo."
- " Bah, Bay, Boo."
- "Tah, Tay, Too," &c., and concluding with-

"Yah, Yey, Yoo."

Then follows, in the case of the larger board, the phrase, "This is the last (letter)."



FIG. 3 .- SMALLER BOARD (REVERSE).

The reverse side of the smaller board was photographed because in a sort of cartouche (resembling somewhat those found on the tombs of Egyptian kings and containing the names of the deceased) is enclosed the name of the owner of the "slate," "Khadijah, daughter of Omor."

H. W. GARBUTT.

Africa, South. Haddon.

# Additional Note on Copper Rod Currency from the Transvaal. By A. C. Haddon, Sc.D., F.R.S.

In the current number of Folk-Lore (Vol. XIX.) there is an interesting paper on "The Balemba of the Zoutpansberg (Transvaal)," by the Rev. H. A. Junod, in which he says (p. 280): "The Balemba have been the true pioneers of civilisation amongst "the Ba-Suto, who were then in a very primitive condition. Some Ba-Suto learned from them. The Palabora people, for instance, became quite a tribe of blacksmiths, and they have exploited for many decades the copper of the Palabora hills and sold it to their countrymen under the form of 'lirale,' viz., sticks of about  $1\frac{1}{2}$  feet in length,  $\frac{1}{2}$  inch in breadth, finished off by a semi-circular head. These 'lirale' are still sometimes found among the Low Country natives. Have the Suto blacksmiths of the Iron Mountain of the Klein Letaba also learned their art from the Balemba? It is difficult to say. I heard natives assert that they 'came out from the reed'; that is to say,

"they were created holding in their hands the instruments of their forge! At any rate the iron industry of Klein Letaba is very old." This information supplements that given by Mr. H. D. Hemsworth and myself in Man, 1908, 65, 66.

A. C. HADDON.

## Australia: Linguistics.

Schmidt.

On the Classification of Australian Languages. By Father W. Schmidt, S.V.D.; communicated by N. W. Thomas.

The languages of Australia fall into two main groups: (1) The northern, whose many tongues are, perhaps, far from being related to each other, and certainly are unconnected with the languages of the group following; and (2) the Australian group proper, whose components are clearly related to each other.

I.—Broadly speaking, the northern group does not extend further south than 20° S., the only exception being the Aranda (Arunta) language, which occupies an area between 20° and 27° S. On the other hand, we find that in the eastern half of the Continent, Australian languages penetrate into the northern area; south of the Gulf of Carpentaria the binna group (see below); more to the east the walloo-dilli (see below) group extends as far as 18° S.; while on the coast itself the binna group reaches as far as 15° S.

The great number of independent languages in this relatively small area of the northern group, which is not split up by lofty and impassable mountain chains, suggests that this multiplicity had its origin not in Australia itself, and that these languages are Papuan, which have penetrated from the north. These languages have in many cases no inclusive and exclusive first person plural and dual, which are never wanting in Australian tongues proper.

II.—The Australian languages proper fall into two sub-groups of very unequal size: one which places the genitive before the determinated word, the other which places the genitive after the word, the latter group being the older.

To the second sub-group, with postposition of the genitive, belong all the Victorian languages and perhaps also the Narrinyeri; thus in this sub-group fall all patrilineal southern tribes, which practise neither circumcision nor subincision, together with certain matrilineal tribes of West Victoria. Of the east coast peoples, the Gippsland tribes are in this sub-group, while those north of them, as far as 34° S., occupy a position intermediate between the two sub-groups. The patrilineal group near Brisbane, on the other hand, is not included in the older group, though the vocabulary of these tribes differs markedly from others in words otherwise common to the whole of Australia, such as those for "hand" and "eye."

All the remaining languages belong to the first sub-group. I have established their relations by a comprehensive survey, but their main divisions are adequately shown if we take the word for "ear" as a basis, and subdivide further by using the words for "eye" and "nose."

#### FAMILY: AREA: (word for "ear") 1. tuonka -- South-west corner of W. Australia. (2. kulga, wolka -- Remainder of W. Australia as far as 20° N. and 130° S. 3. yuri-(a) mudla (nose) - Centre of S. Australia as far as the Arunta. (b) mendolo (nose) - East of 3(a) about 30° S. 4. talpa, kut'era - North-east of 3(a). marl - W. Victoria, south and south-east of 3(a) and (b). [ 184 ]

## FAMILY:

#### AREA:

6. gorai, kuri -	-	<ul> <li>South-east corner of N.S. Wales.</li> </ul>
(7. wutha	-	- Wiradhuri.
{ 7. wutha 8. bidna, binna -	-	- All N.S. Wales not included in 5 and 6, a
		broad strip of the east coast of Queensland,
1		an area south of the Gulf and enclaves at
· J		26° S. 143° E., 26° S. 130° E.
9. dilli (eye)—		
(a) munga (ear)	-	<ul> <li>A strip two degrees broad from 27° S. 147° E.</li> </ul>
		to 21° S. 142° E., with (?) two enclaves
		(Curr, 116, 117).
(b) wallu (ear)	-	- East of 9(a) from 23° to 18° S., alternating
		with group 8 along the coast.

In the above table the groupings into larger divisions are shown by brackets. It should be noted that in vocabulary the whole of sub-group I is related to sub-group II, though its individual members have more in common than either the whole group or any of its members has with sub-group II.

As regards the position of the genitive in sub-group II, it must be remarked that in the languages of this group the suffix genitive appears only in unconscious compounds and adverbial expressions, but not where the genitive is formed with the case-ending of to-day.

That postposition of the genitive is older is shown by the fact that the possessive in the case of persons and parts of the body is a suffix. True, the possessives are properly genitive forms with case suffixes, which presupposes a genitive preposition, but the possessive form is not felt to be a genitive, and the new form is employed in the old fashion.

In support of this view may be mentioned the fact that in these languages personal pronouns are already compounds of a particle and a suffixed pronominal stem proper. In many languages the personal pronoun is different from the possessive; thus in Thagurru—

Wa-n, I.
 Wa-r, thou.

nagal-ik, mine. nagal-in, thine.

or in Tyeddyawurru-

Wang-an, I.
 Wang-ar, thou.

wang-ek, mine. wang-in, thine.

Elsewhere a second particle is added to the first and the pronominal stem added to the whole:—

Wuddyawurru—1. Bang-ek, I.

bang-ordig-ek, mine.

It is worthy of note that in Tasmanian, though it has already adopted preposition both in syntactical and in compound genitives, the possessive in suffixed, e.g., nubrena-mina (eye of me), and the suffix genitive is shown to be here, too, the older form. The languages of S.E. Australia, therefore, agree with Tasmanian in one of the most important points—the position of the affixless genitive.

As I have not completely finished my researches, the above statements are of a somewhat provisional character, but I trust that in their principal features they will hold good, and that any corrections that may be made subsequently will be only of a secondary nature.

W. SCHMIDT, S.V.D.

Borneo.

Hewitt: Shelford.

Some Sea-Dayak Tabus. By Mrs. Hewitt. Communicated by R. Shelford, M.A.

The following extract from a letter communicated to the Sarawak Gazette of October, 1908, by Mrs. Hewitt, wife of the present curator of the Sarawak Museum, seems to deserve a wider circulation than the official organ enjoys. Mrs. Hewitt, in her letter, describes, in a lively and attractive style, her experiences amongst the Sea-Dayaks of Banting, Sarawak. The Sarawak Government recently launched a punitive expedition against some rebels in the head waters of the Batang Lupar river and drew a contingent from the loyal Dayaks of Banting; it was for the sake of these men that the women of Banting observed the tabus detailed by Mrs. Hewitt. It may be noted with regret that the religious observance by the women of these tabus was of little avail, for I gather from the official reports of the expedition that the Banting men incantiously pushed ahead of the main force, fell into an ambuscade, and sustained heavy loss. The following are the tabus as given by Mrs. Hewitt:—

#### For the Women.

- (1) They must wake up very early in the morning and as soon as light open the windows, otherwise the men will oversleep themselves and not hear the warning cry of the began (panic). The windows are opened early so that it may be light and bright for the men to set out on the march.
- (2) It is mali (forbidden) to put oil on the hair or the men will slip when walking on a batang.
- (3) The women must neither sleep nor doze during the daytime or the men will be drowsy when walking.
- (4) They must cook and scatter popcorn on the verandah early each morning. Thus shall their husbands be agile in their movements. At the same time the women sing a verse:—

Oh kamba, enti tinggi surok, Enti baroh, perjok Munsoh suroh genong Awak ka baka ditanggong, baka sangkutong.

which being interpreted is—"Oh, you absent ones, if any high thing overhanging "impedes your progress, dodge under it; any low thing, jump over it. Petrify "your enemies; prevent them lowering arm or hand raised against you."

- (5) It is forbidden to bathe in the usual way—wetting the petticoat—for should the kain become wet and heavy so will the men feel heavy in body and unable to walk or run quickly.
- (6) The rooms must be kept very tidy, all boxes being placed near the walls, for should they cause anyone to stumble then will the men fall when walking or running, and thus they may be at the mercy of the enemy.
- (7) They must eat food only at meal times and then properly sitting down; otherwise their husbands will be tempted to eat leaves or earth when on the march, thus provoking the amusement or even contempt of their friends.
- (8) At each meal a little rice must be left in the pot and this must be put aside so that the men may always have something to eat and need never go hungry.
- (9) On no account must the women sit long enough to get cramp whilst weaving the *hain*; otherwise the men also will become stiff and be unable to rise up quickly after sitting or to run away.

To obviate this the women intersperse their weaving operations by frequent walks up and down the verandah.

- (10) It is forbidden to cover up the face with a blanket or the men will not be able to find their way through tall grass or jungle.
- (11) They must not sew with a needle or the men will tread upon tukak (sharpened spikes of bilian wood or bamboo placed point upwards in the ground by the enemy).
- (12) Flowers must not be worn nor scent used; otherwise the movements of the men will be revealed to the enemy by their smell.
- (13) It is unlucky to break the *hain apit* (the piece of leather or bark of tree with which the women support their backs when weaving). Should this occur, the men will be caught by the chin on some overhanging bough.
- (14) Should a wife prove unfaithful while her husband is away, he will lose his life in the enemy's country.

### For the Men.

- (1) They must not cover up the rice when cooking, or their vision will become obscured and the way be difficult to see.
- (2) The spoon must not be left standing up in the rice pot; otherwise the enemy will so leave a spear sticking in their bodies.
- (3) During cooking time, should the pots be a distance apart from each other they must be connected by sticks; so will the men have neighbours near should they be surprised by the enemy. It is customary, however, to put the pots close together.
- (4) It is mali to pick out the bits of husk from the rice before eating, otherwise the enemy will in like manner pick out that man from a group.
- (5) As the rice is taken from the pot the cavity thus left in the food must immediately be smoothed over; otherwise wounds will not heal quickly.
- (6) It is unlucky to sleep with legs crossed or touching those of a neighbour lest the spears of the enemy smite the unfortunate offender of this taboo.

It is perhaps somewhat doubtful whether the men as a whole obey these rules, but certain it is that the women of Banting followed the restrictions herein imposed; and, moreover, at other villages which I had the pleasure of visiting we found exactly the same state of affairs.

FLORENCE E. HEWITT.

#### REVIEWS.

India: Assam.

Hodson.

The Meitheis. By T. C. Hodson. London: Nutt, 1908. Pp. xvii + 227. 106

The volume, which is the subject of this notice, is one of a series which is being produced under the orders of the Government of India, and which, it is hoped, will in time include all the races and tribes within that extensive empire. Sir Bampfylde Fuller, who at the time that the orders for the preparation of the series were issued held, the post of Chief Commissioner of Assam, drew up a memorandum giving the arrangement to be followed, and invited those who had special qualifications for the task to write the monographs on the tribes of which they had special knowledge, and the volumes which have appeared have done credit to the choice of authors and to the arrangement selected.

The Meitheis is, in some respect, the most interesting and important of the series, and it is extremely lucky that its preparation has fallen to an author with local experience, and in other respects also, so thoroughly competent to do justice to the subject.

The importance of this particular monograph lies chiefly in the fact that the people described are very closely allied to the Nagas and Kukis, some of whom are still in a state of utter savagery, wearing little in the way of clothing, owning nothing but

a few baskets and the simplest of agricultural implements and weapons, living in constant dread of their neighbours, and shifting their miserable hovels every year or two as they exhaust the cultivatable land in their vicinity. The Meitheis, as we see them in Mr. Hodson's graphic pages, are very far removed from such a clan, and yet the various stages in the march of progress are clearly traceable, and, though foreign influences have assisted, the Manipuris have invariably placed their own mark on every custom they have adopted. Another reason for assigning an unusual degree of importance to this monograph is, that in the Meitheis we have a clan which has only been under Hindu influence for about 170 years, and in the "Chronicles" we are able to trace the spread of the new religion from the arrival of the first Brahmin down to the present day. Here we can study the process of converting the beef-eating, "zu"-swilling savage into an orthodox Hindu. As will be seen from Mr. Hodson's chapter on religion, the process is by no means complete, and the people are, in fact, in a state of transformation, though, judging from the following extract, none have progressed very far:—

"In Manipur, where Hindnism is a mark of respectability, it is never safe to rely on what men tell you of their religion; the only test is to ascertain what they do, and by this test we are justified in holding them animists."

The fact is that the Manipuri is a very conceited person, and where he condescends to adopt any foreign custom he does so with such alterations and additions as give the custom the appearance of being indigenous. Thus, while he professes to be a rigid Hindu and will tear down his house should a European or Mahomedan place a foot on the threshold, he at the same time allows Brahmins to minister to certain of the gods of his animistic forefathers and assiduously propitiates the spirits of the hills and dales, as do his near relatives, the surrounding Naga and Kuki clans. To quote Mr. Hodson once more:—

"The old order of things has not passed away by any means, and the Maiba, the doctor, and priest of the animistic system still find a livelihood, in spite of the competition on the one hand of the Brahmin, and of the hospital assistant on the other.

"It is possible to discover at least four definite orders of spiritual beings who have crystallised out of the amorphous mass of animistic deities. There are the Lam Lai, gods of the country side, who shade off into nature gods controlling the rain, the primal necessity of an agricultural community; Umang Lai, or deities of the forest jungle; the Imang Lai, lords of the lives, the births, and the deaths of individuals: there are the tribal ancestors, the ritual of whose cult is a strange compound of magic and nature worship. Beyond these divine beings, who possess in some sort a majesty of decent behaviour, there are spirits of the mountain passes, spirits of the lakes and rivers, vampires and all the horrid legion of witchcraft. Quot homines, tot damones, with a surplusage of familiars who serve those fortunate few who are recognised as initiate into the mysteries."

In fact, the Meitheis are now in a stage, through which many now most orthodox Hindu clans must have passed. What will be the end of the struggle between the new and the old religion time only can show, but it may safely be prophesied, that the resultant faith will bear clear marks of the Meitheis' ancient animism. The chapter on Religion is the best in the book, all of which is good.

It is to be regretted that Mr. Hodson never witnessed a Lai-haraoba. The pleasing of the gods for the ceremony deserves a more detailed description than that which he quotes from Colonel McCulloch. There are several points connected with it which are of great interest; e.g., the process by which the Lai is induced to quit his habitation, be it a stream bed, a sacred stone, or a tree, and enter the "host" provided for him, which is done by the Maibi or priestess working herself up into a state of incoherent frenzy. The "host" may be stones or fruit or flowers, which are then borne with every show of

reverence by two old men in spotless raiment, over whose heads white ceremonial umbrellas are carried, and who are preceded by virgins and followed by married women. It would be interesting to know by what process the Lai is induced to return to his proper place and what becomes of the "host." Again, the extraordinary scene with which the ceremony terminates is worthy of notice. The Maibis, some of whom are men in women's clothes, exchange the most vile abuse with a body of clowns, until some of their number work themselves up into a frenzy and declaim incoherently in an unknown tongue, what are said to be, prophecies regarding the reigning house.

The wonderfully elaborate system of officials, the Lallup or corvée system, and the various sumptuary laws, all very interesting, especially if it is kept in mind how little removed, in some respects, the Meitheis are from the loosely-organised Naga and Kuki claus around them, are dealt with in a most comprehensive manner. This is fortunate, as the administration of the country for sixteen years by the political agent has brought about many changes, and many of the institutions here described have passed away for good. How complex the old system was may be inferred from the fact that, though Mr. Hodson's description is of the briefest, six pages are necessary to describe the duties of the officials connected with the administration of the country and the Rajah's household. It appears that every action of a Manipuri brought him in contact with at least one department, fully equipped with a staff of officials, whose high-sounding titles carried no pay, and dealings with whom, therefore, were very expensive.

The following short extract describes some of the departments:—"Urungba "Loisang is charged with the duty of providing wood, bamboos, creeper, &c. The "Yumjilloi have to keep the State buildings in repair. The duties of the Maifenga "class are probably of the same nature as those of the two preceding classes. The "Usaba department is in charge of heavy carpentry work. The Hijaba bangmai "provide cut bamboos of all sizes. The Paija suba fasten up the creepers which "are used in domestic architecture. The Humai-roi has to do with the Lois who "make the hand fans (humai-fan)," and so on for every petty work a special department superintended by a bevy of officials.

Mr. Hodson makes many references to the "Chronicles," and there are many pages of history scattered through his book, but matters would have been made easier for those who have no previous knowledge of the subject if a special paragraph had been devoted to history. It would also have been interesting to know what value Mr. Hodson attaches to the "Chronicles," for as these profess to give a full account of events from the eighth century A.D., the question of their historical value is of importance. The only reference to the ancient Manipuri written character is in the concluding lines of the book, in which it is said, on the authority of the Linguistic Survey of India, "to date to the rise of the Bengali influence in 1700 A.D., but local "tradition declares that the Chinese immigrants in the reign of Khagenba first taught "the art of writing." It is a pity that this subject was not more fully treated. Some of the letters of the ancient script, which is still to a certain extent in use, do certainly resemble Bengali characters, but others do not. If the written character only appeared in the eighteenth century, on what authority do the "Chronicles" rest?

Among the surrounding cognate clans there are no signs of totemism, but there are some reasons for thinking the Manipuri "yek" is a totemistic division. It is exogamous, and is sometimes named after animals. Mr. Hodson, when dealing with tabu, says, "Each clan in Manipur regards some object as 'namungba' to it, and "believes that, if through inadvertence some member of the clan touches one of these "objects, he will die a mysterious death or suffer from some incurable, incomprehensible "disease, pine away and die." As examples of the articles, a reed, a buffalo, and a fish are given. Mr. Hodson makes no reference to totemism, and it would have been interesting to have heard his reasons for omitting to do so.

The book is well got up, and the illustrations, especially those by a native artist, are extremely interesting.

Mr. Hodson is to be congratulated on his monograph, which is a most valuable addition to our knowledge of the clans on the north-eastern frontier of India.

J. SHAKESPEAR.

Ethnology.

Keane.

The World's Peoples. By A. H. Keane, LL.D., F.R.A.I. London: Hutchinson & Co., 1908. Pp. xii + 434. 20 × 14 cm. Price 6s.

This work contains 270 illustrations, most of them copies of direct photographs of representatives of the many different races scattered over the world's surface. As a mere collection of pictures the book must be valuable to the student of ethnology, and, without fear of contradiction, it may be asserted that nowhere else can such a large and varied series of ethnological portraits be found in so small and handy a compass.

These illustrations Dr. Keane has called to his aid in an endeavour, out of his wide and profound knowledge, to popularise ethnology. The work appeals, as he says himself in the preface, especially to the general reader. It may well be hoped that the publication of such a book as this indicates an awakening of real interest in anthropology and of a consciousness of its importance to the people on whom rests the responsibility of governing the many different races within the British Empire.

The work is, in the main, planned on the same lines as the author's well-known Man Past and Present. The peoples of the world are arranged in four groups: Negro and Negrito, Mongol, Amerind, and Caucasian. The work, in fact, may be said to consist of four interesting essays, one on each of these groups. The first and last receive considerably more attention than the other two, though that on America is perhaps the most interesting and most informing.

Whilst avoiding the more disputable aspects of the subject, much attention is given to the religious and superstitions of the different peoples. The general reader is, however, wisely spared ever-to-be-disputed subjects, such, for example, as the origin of exogamy and the marriage intricacies of the native Australians.

In the popularisation of any science the pitfall into which the exponent is most liable to fall is too great a desire to be definite and certain, not to say dogmatic. The general reader turns away in weariness from the contemplation of the interminable pros and cons which so many scientific problems necessitate, and in which the specialist too often revels. A short way out of this is to adopt one line and to stick to it, ignoring all others. Hence the charge often made against such popularisation that it is unscientific. The better way out of the difficulty is, we venture to think, to omit such uncertainties altogether from a popular treatise. The art of the populariser consists in his ability to play the part of a sieve, allowing the certain to pass and keeping back the uncertain, doubtful, and speculative.

Dr. Keane has evidently realised this, for in his preface he says the book deals not with faint probabilities, but with established facts. Throughout the body of the work he has borne this successfully in mind. We are not so sure, however, that he has acted up to his canon in the important introductory chapter in which he treats of the "Human Family," its origin and dispersal. Merely on the strength of Dubois' discovery of the top of a skull, a thigh bone, and two teeth, not found together, to locate the origin of mankind in the island of Java, and his necessary dispersal therefrom, seems hardly dealing with established facts; and to go further and give up a whole page to a diagram representing man's descent from the problematical Pithecanthropus erectus, and giving him, even without a query, a cranial capacity of 1,000 cc.! the established fact recedes still further into the "infinite azure of the past." Then, in further development of the consequences of this origin, we have

"the now submerged Indo-African continent," spoken of as if it were an established fact. Surely if there is a subject within the domain of speculation it is the former existence of this continent. These, we venture to think, are among the very uncertainties of ethnology and geography, which should be avoided rather than introduced in a popular exposition of the subject. They are examples of what the sieve of the scienific populariser would keep back.

In this same introductory chapter Dr. Keane refers briefly to the Stone Age. He would have added much to the value and interest of the work to the general reader if he had given more space to this and the Prehistoric period generally. If this subject was to be dealt with at all, we believe, from a popular point of view, a more extended exposition of it would have been advantageous to the general reader as an introduction to the ethnology which follows.

Having said so much in criticism it only remains to add that Dr. Keane has by this work only added another to the many obligations which authropology already owes him, and it is to be hoped it will not be the last occasion on which he will apply his unrivalled knowledge to the popularisation of a science of such great practical import to our world-wide Empire.

E. A. PARKYN.

#### Africa: Swahili.

Velten.

Prosa und Poesie der Suaheli. Von Professor Dr. G. Velten, Professor für Suaheli am Seminar für orientalische Sprachen der Friedrich Wilhelms-Universität, Berlin. Published by the Author, Berlin, Dorotheenstrasse, 6.

The number of Swahili students in this country is few, but that of serviceable reading books published here is smaller. We have almost nothing with the exception of Steere's Swahili Tales, and some other publications of the Universities Mission. Kibarak, by-the-bye, was published at Zanzibar, and is not very easily obtainable in England. The amount of native literature which has made its appearance in Germany is really very creditable, though no doubt this partly arises from the fact that this branch of research is subsidised by Government. Büttner's admirable Anthology of Prose and Verse (1894) has never been superseded, though it may usefully be supplemented by Dr. Velten's publications, some of which have already been noticed in these pages. The latest addition to their number is of especial value to the learner on account of the many excellent dialogues embodying useful words and idioms, which can be depended on as genuine, being all written or dictated by natives.

From an ethnographical point of view the tales, proverbs, riddles, and songs are of unusual interest. Some of the former are independent versions of those made familiar by Steere, e.g., "Hadisi ya nunda" (p. 107), which corresponds to part of "Sultan Majnun." Some of them we do not remember to have met with before. We have also various habari za zamani ("accounts of long ago"), i.e., historical accounts of Kilwa, Lindi and other towns on the coast, and a description of a journey into Uzaramo. Of the poetry, the little traditional folk-songs are most interesting, though the longer poems on the German Emperor, the late Major von Wissmann, and other public characters, deserve attention as curiosities. As this is scarcely a book to come under the notice of the general reader or to be translated as light literature, a warning that some of the stories (apparently derived from Arabic sources) are more curious than edifying may seem superfluous.

A. W.

#### Britain.

Holmes.

Ancient Britain and the Invasions of Julius Cæsar. By T. Rice-Holmes, Litt.D. Oxford: Clarendon Press, 1907. Pp. xvi+764. 23×14 cm. Price 21s.

This is a remarkable book, both in aim and achievement. Its author has sought to collect all available evidence concerning the life of prehistoric Man in Britain. He has therefore been under the necessity of consulting an extensive and scattered literature, of becoming familiar with all recent work in archeology, anthropology, and philology. The voluminous bibliography supplied in footnotes to the text fully testifies to the completeness with which he has complied to the requirements of his task.

Although the book is in essential a summary of the work and opinions of others, some original information is here and there contributed, especially in the section dealing with the invasions of Cæsar. Moreover, the summary is far from being slavish or uncritical; its tone is controversial rather than otherwise. He has a wholesome disregard for mere traditional authority, a disregard which, however, consorts ill with the pontifical manner in which he expresses himself upon questions which will perhaps always retain a not inconsiderable element of doubt.

The anthropological section of the book is that which most fittingly finds mention in the pages of Man. In it are discussed the origin of the Neolithic population and the appearance of the "Round Heads." The first subject presents little difficulty, for, with most recent writers, Mr. Rice-Holmes accepts the continuity of Man's occupation of Europe from Palaeolithic time onwards.

He regards the "Round Heads" as ethnically distinct from the Long Heads. He declares that they certainly came from Eastern Europe and possibly from Asia. The centre of their dispersion was the Alpine region. He does not explain why, if there is this distinction, the long- and round-heads should almost universally be found together, with heads of all varieties of intermediate shape, in the prehistoric graves of Europe. Why again, if their original home was certainly Eastern Europe, should they only be found unassociated with long-heads in the cist burials of Aberdeenshire? Further, if the Alpine districts were the centre of dispersion, how is it that the remains of round-heads are found in graves of an earlier date in Western Europe than in Central Europe?

How, too, on his assumption are we to explain the presence of a sub-brachy-cephalic population in North Wales in Mesolithic time? This population was almost certainly earlier than that whose dead are found in the long barrows of Wiltshire, and yet it was well on its way to a state of full brachycephaly.

Although, however, the treatment of this and other vexed questions betrays a somewhat superficial knowledge of the facts of the case, it should be remembered that the subjects with which the author deals are numerous, vast, and complicated. He never fails to be interesting and suggestive. He has laid students of the early history of our country under a debt of gratitude which will long be recognised and which it is a pleasure to acknowledge.

W. W.

#### PROCEEDINGS OF SOCIETIES.

Huxley Lecture.

Royal Anthropological Institute.

The Annual Huxley Memorial Lecture was held on Friday, November 13th, in the Theatre of the Civil Service Commission (by permission of the First Commissioner of Works), when Dr. William Z. Ripley, Professor of Economics in Harvard University, delivered an address on the "European Population of the United States." At the conclusion of the lecture the Huxley Memorial Medal was presented to Dr. Ripley by the President.

## ANTHROPOLOGICAL NOTES.

THE death is announced of Mr. Otis Tufton Mason, of the Smithsonian Institution. Mr. Mason was one of the leading American anthropologists, and had been an Honorary Fellow of the Royal Anthropological Institute since 1886.

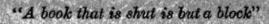
Mr. D. G. Hogarth has been nominated to succeed Dr. Arthur Evans as Keeper of the Ashmolean Museum at Oxford

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